

NIRB File No.: 12MN036 NWB File No.: 2AM-BRP----AANDC File No.: N2012T0025

April 7, 2014

Matthew Pickard
Director, Environment & Community Relations
Sabina Gold & Silver Corp.
930 West 1st Street
North Vancouver, BC V7P 3N4

Sent via email: <a href="mpickard@sabinagoldsilver.com">mpickard@sabinagoldsilver.com</a>

RE: <u>Information Requests received from Parties regarding the Back River Draft EIS & Sabina Gold & Silver Corp.'s Applications for Works to be Excepted from the NIRB Review of the Back River Project</u>

Dear Matthew Pickard:

On February 11, 2014 the Nunavut Impact Review Board (NIRB or Board) initiated the public technical review of the *Draft* Environmental Impact Statement (DEIS) submitted by Sabina Gold & Silver Corporation (Sabina or the Proponent) for the Back River project proposal by requesting that interested parties submit Information Requests (IR) to facilitate their technical review of the DEIS.

On or before March 24, 2014 the NIRB received IR submissions from the following parties:

- Kitikmeot Inuit Association 140 IRs
- Government of Nunavut 42 IRs
- Government of Canada 152 IRs
- Government of the Northwest Territories 13 IRs
  - o 1 IR directed to the Government of Nunavut
- Lutsel K'e Dene First Nations 5 IRs
- Yellowknives Dene First Nations 13 IRs
- Sabina Gold & Silver Corporation 3 IRs
  - o 3 IRs directed to Federal and Territorial government agencies and departments

All submissions are available from the NIRB's online public registry at the following link:

http://ftp.nirb.ca/02-REVIEWS/ACTIVE%20REVIEWS/12MN036-SABINA-BACK%20RIVER/02-REVIEW/07-IRS%20%26%20TECHNICAL%20REVIEW/02-INFORMATION%20REQUESTS/.

The NIRB has completed its review of the IRs received and hereby requests that Sabina respond to those IRs which have been determined to be relevant to the current stage of the Review process and necessary to facilitate parties' technical review of the DEIS and subsequent development of technical review comments.

Certain IRs contained within parties' submissions either appear to be outside the scope of what information is required for this phase of the Review and which may therefore be more appropriately addressed through technical review comment submissions, or request information that, while it may be useful to parties, has been requested from the Proponent and may be provided only at its discretion. While it is the Board's expectation that the Proponent will review all IRs, at this time the NIRB has provided a listing of specific requests (see Appendix A) for which the Proponent is either expected to provide a partial response, or is not expected to address within its response to IRs (IR Response Package); the latter are being forwarded on for information only, or for which the nature and limits to provision of data may prevent the Proponent from responding fully.

The NIRB notes that a number of parties identified concerns with certain aspects of the Proponent's DEIS submission, including technical assessments requiring additional discussion, collection, or reinterpretation of baseline data, and timelines for when certain information may be expected. Where information requested cannot be made available at the present time through a response to IRs, the Proponent must clearly identify when this information will be forthcoming and/or whether it intends to include the information within its Final EIS submission.

When preparing its IR Response package, the NIRB recommends that the Proponent consult with parties as necessary to ensure the information to be provided meets the expectations of reviewers moving forward. Furthermore, where multiple IRs have outlined the same or similar information requirements, the Proponent is advised to provide one response that will adequately address these requests, avoiding unnecessary duplication. The Board respectfully requests that Sabina review all submissions as available via the NIRB's online public registry and supply the NIRB with an indication of an anticipated date for submission of its IR Response Package, on or before **Tuesday April 22, 2014**.

## APPLICATION FOR ACTIVITIES TO BE ALLOWABLE AS EXCEPTIONS TO THE NIRB REVIEW PER NLCA 12.10.2

As you are aware, following an initial review of Sabina's DEIS, on March 21, 2014 the NIRB requested that Sabina provide clarification on applications provided within the DEIS for activities to be excepted from the NIRB's Review pursuant to section 12.10.2 of the Nunavut Land Claims Agreement (NLCA). Specifically, the NIRB requested that Sabina provide a response to the following:

 Confirm (and clarify if necessary) that the activities being sought as exceptions to the NIRB Review process were consistent with the listing in Table 2.3-3 of Volume 2 of the

- DEIS, and that the applications contained within appendices 2A-2J of Volume 12 of the DEIS had been provided in support of the application for activities to be excepted from the NIRB Review process;
- Confirm whether the authorization applications contained within appendices 2A-2J of Volume 12 of the DEIS were draft documents, or whether these were to be considered complete applications; and,
- Confirm whether and which authorization applications contained within appendices 2A-2J of Volume 12 of the DEIS had been submitted to the relevant authorizing agencies for consideration, or whether their inclusion within the DEIS was intended to trigger the respective licensing processes.

On March 28, 2014 the NIRB received Sabina's response, which confirmed that the various applications contained within Volume 12 of the DEIS had been intended for the Board's consideration of works to be allowed as exceptions from the Review of the Back River project proposal, confirmed that the application packages were considered to be complete (pending review by relevant authorizing agencies), and finally, which confirmed that the applications had not yet been submitted to relevant authorizing agencies (separately from the DEIS submission to the NIRB) to initiate associated licensing, permitting or other approval processes.

The NIRB appreciates Sabina's timely provision of the requested clarification. The NIRB is now prepared to initiate its consideration of Sabina's exception applications and will be guided by the process set out in the NIRB's "Draft Guide to Exceptions from the Review Process", accessible online from the Board's public registry at the following location:

## http://ftp.nirb.ca/04-GUIDES/02-OLD%20GUIDES/

There are limited circumstances where the NIRB may determine that exploration and/or development activities can be allowed to proceed while a related project is undergoing Review:

- 1. Permits, licences or approvals are required to facilitate scientific research and/or the collection of data to support the Review of a project proposal;
- 2. Permits, licences or approvals are required to allow for continued exploration and/or bulk sampling programs while a related project is undergoing Review; and/or
- 3. Permits, licences or approvals are required to facilitate the limited transport and storage of equipment and materials related to a project undergoing Review, in recognition of the seasonal constraints imposed by the arctic conditions of the Nunavut Settlement Area.

Following a cursory conformance review of Sabina's exception applications against the information requirements set out in the Draft Guide referenced above, specifically those items 1-8 listed within Section 6 (pp. 8-10), the NIRB has found that additional information is required to facilitate a public technical review of the applications. As part of its consideration, the NIRB intends to contrast the activities presented within Volume 12 of the DEIS against the scope of exploration and development activities associated with the Back River project which have been previously considered by the Board and screened in accordance with Part 4 of Article 12 of the NLCA. To facilitate its review, in addition to revisiting the supporting information requirements set out in the Draft Guide, the NIRB also requests that Sabina provide an indication of whether

and which activities may have been previously considered by the Board as a part of individual files associated with the Back River project proposal, which may include the following:

- 04EN012: Hackett River and Wishbone Projects
- 04RN101: Winter Road From Bathurst Inlet To Goose and George Lake
- 04RN111: Winter Road Construction, Northern Portion of Tibbitt to Contwoyto Lake Road System
- 04RN015: Winter Road between George Lake and Goose Lake
- 06QN027: Tank Farm and Quarry Goose Lake
- 06QN028: Tank Farm and Quarry George Lake
- 07YN030: Hackett River Environmental Baseline Program
- 08EA084: Beechy Lake Area Exploration
- 09RN066: Bathurst Inlet to Back River Winter Road and Barge Landing

Following the receipt of the additional information requested above, the NIRB will again undertake its conformance review for Sabina's exception applications. When the NIRB determines that the exception applications are complete, the Board will invite authorizing agencies, community organizations, Designated Inuit Organizations and members of the public potentially affected by the proposed exploration and/or development activities to provide the NIRB with their comments in respect of the applications within a specified time. The NIRB will give consideration for potentially aligning the public commenting timelines with the upcoming technical comment period for the Back River DEIS as appropriate.

The Board encourages Sabina to engage with the various authorizing agencies responsible for issuing new or amended licenses, permits and/or approvals for works under consideration as allowable exceptions from the NIRB's Review of the Back River project proposal, to confirm application completeness as well as to ensure any further requirements of individual authorizing agencies are met prior to the NIRB making its determination.

Once again, the NIRB requests that Sabina provide an indication of its anticipated timeline for response to Information Requests to the NIRB at <a href="mailto:info@nirb.ca">info@nirb.ca</a> or by fax to (867) 983-2594 on or before **Tuesday April 22, 2014.** 

Please direct all forthcoming submissions to the NIRB at <u>info@nirb.ca</u> or by fax at (867) 983-2594.

If you have any questions or require further clarification regarding the NIRB's Review of the Back River Project, please contact Tara Arko, Technical Advisor, at (867) 983-4611 or via email at <a href="mailto:tarko@nirb.ca">tarko@nirb.ca</a>.

## Sincerely,



Amanda Hanson Director, Technical Services Nunavut Impact Review Board

cc: David Hohnstein, Nunavut Water Board

**Back River Distribution List** 

Attached: Appendix A – Information Requests Identified by the NIRB as Requiring a Modified or No Response

P.O. Box 1360 Cambridge Bay, NU X0B 0C0 Phone: (867) 983-4600 Fax: (867) 983-2594

## APPENDIX A: INFORMATION REQUESTS IDENTIFIED BY THE NIRB AS REQUIRING A MODIFIED OR NO RESPONSE

In the table below the NIRB has attempted to identify those Information Requests (IRs) which either require a modified response, or which do not appear to meet the criteria to qualify as an IR required for the development of technical review comments as part of this stage of the Review for the Back River project proposal. Generally, each of the following items appeared to be either: editorial comments on content; issues more appropriately addressed through technical review comments; requests for data to facilitate independent analysis; or it was unclear to the NIRB how the IR in question would facilitate development of technical review comments (e.g. comments on items outside of the scope of the NIRB's Review).

While the Proponent will not be explicitly required to address the following items within its IR Response Package, the NIRB strongly recommends that Sabina thoroughly review each item and make its own determination regarding the need for or its ability to, provide an appropriate response.

IR No.	Information Request	NIRB Rationale
	Kitikmeot Inuit Association	
KIA-2	Direct and indirect habitat loss are considered in habitat loss and disturbance sections, but not together. They will occur together and cause additive effects, however, during the construction, operation, and closure and reclamation phases. Please provide calculations of combined direct and indirect habitat loss for the construction and operation phases.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-4	We cannot evaluate how representative these data are in the context of movement of the entire herd without more information on numbers and demographics of collared caribou. We request the number of radio-collared animals used to produce maps be included in brackets within the legend for each year. Information on the numbers of collars per sex and age class, are also requested in the body of the text.	The request for updated mapping and revisions intext do not meet criteria for IRs — more appropriately addressed through technical review comments; however the Proponent is requested to provide the requested information on the number of animals used to produce maps as well as information on sex and age class at this time.
KIA-6	Details on the proposed research collaboration between the Government of Nunavut DOE and proponent is sought.	Do not meet criteria for IRs—information requested is not within the scope of the NIRB's Review.

IR No.	Information Request	NIRB Rationale
KIA-7	Three effects are evaluated separately, but in reality they interact to produce larger effects. An evaluation of effects of (direct + indirect) habitat loss, disturbance, and productivity, and the effect of all of these acting in concert, should be provided.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-12	This section states that results of the 2013 wildlife baseline program will be available in early 2014. Please supply this baseline for review with DEIS materials.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-13	Three effects are evaluated separately, but in reality they interact to produce larger effects. An evaluation of effects of (direct + indirect) habitat loss, disturbance, and productivity and the effect of all of these acting in concert should be provided.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-18	Section 5.6.3 states: "It is assumed that mitigation for all projects within the CEA boundary for grizzly bears will be similar to those implemented for the Back River Project". This appears to be a copy and paste error. Please provide correct text.	The Proponent is requested to clarify with correct text if necessary, however revision and resubmission of DEIS materials does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-20	The potential impacts of contaminants on grizzly bears and other wildlife VECs are not assessed in detail. There is a small section in Volume 8 considering risks to terrestrial wildlife, but it does not go into the species-specific detail needed to evaluate chemical risks. Since grizzly bears are fat-rich top predators, was bio-magnification included in risk assessment models? Similar assessments should be considered for caribou because of the importance of caribou fat to Inuit subsistence. These details could not be found in these materials, or in Volume 8. Please provide more details on the assumptions of contaminant intake and metabolism in species-specific risk assessment models.	The information requested on assessment of chemical risks, assumptions of contaminant intake and metabolism, and inclusion of bio-magnification should be provided; however the request for similar assessments for caribou does not meet criteria for IRs — more appropriately addressed through technical review comments.
KIA-24	See comment regarding the caribou habitat loss and disturbance sections: direct habitat loss + indirect habitat loss need to be evaluated for the construction, operation, and closure phases. Seeing these totalled values within the habitat loss section for relevant phases, which represent enough time for additive effect to impact wildlife prior to the removal of indirect habitat loss, would aid in the	Does not meet criteria for IRs – more appropriately addressed through technical review comments.

IR No.	Information Request	NIRB Rationale
	technical review and assessment of impacts.	
KIA-25	"The assessment focuses on artificially dissected effects, which are reduced by virtue of their consideration in isolation. In reality, when and where they interact will have the greatest impact on these wildlife VECs.  The most important effect on wildlife VECs will be synergistic and additive impacts of all of the effects." This evaluation of total effects should be provided and discussed.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-26	Please include rationale as to why the shipping route was not evaluated along its extent, and how effects that fall outside of the area will be addressed, mitigated and responded to (i.e., in the case of a spill). Please include an alternatives analysis of alternate shipping routes, and their relative ecological and social costs and benefits.	The request for a rationale for evaluation of shipping route is included as an IR, however the request for an alternatives analysis of shipping routes does not meet criteria for IRs — more appropriately addressed through technical review comments.
KIA-27	This section does not provide adequate information on marine mammals other than ringed seals that could occur near the commercial Northwest passage shipping route during the shipping season nor does it objectively evaluate potential effects. Terms like "a few bowhead whales" and "Narwhals occur in small numbers" should be replaced with referenced literature and data or a discussion of data gaps.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-28	The contrast between the post calving (light green) and summer Bathurst caribou are difficult to differentiate on the map. Please choose more strongly contrasting shades.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-29	Please change NIRB link titles to match the volumes, sections, and appendices they apply to such that information can be easily found and reviewed. Less subdivision of volumes and chapters would also help. Some of the links are also out of order, making reading materials in sequence difficult. This should be corrected prior to the technical review.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-30	The Inuit TK included on pages 5-9 and 5-10 mention the importance of certain lakes as sites with high caribou abundance that are not marked on Figures 5.1-2, 5.1-3, 5.1-5 and 5.1-6 (e.g., Beechy Lake). Please include locations on maps.	The submission of revised maps to include additional information does not meet criteria for IRs – more appropriately addressed through technical review

IR No.	Information Request	NIRB Rationale
		comments, however, the Proponent may wish to provide the updated information at this stage where possible.
KIA-31	The link within the terrestrial (Vol 5) section reference appendices such as V5-4A; however the potential options for this link on the NIRB FTP site, under the appendix link within Vol. 5, have names such as: 140120-12MN036-Vol 5 Pt 18-App 4A-IT6E.pdf140120-12MN036-Vol 5 Pt 29-App 4A-IT6E.pdf140120-12MN036-Vol 5 Pt 20-App 4A-IT6E.pdf140120-12MN036-Vol 5 Pt 21-App 4A-IT6E.pdf. Which of these links corresponds to V5-4A? To add to the confusion, none of these links, when entered into, have an appendix label of V5-4A. This is a systemic problem in all appendix links. Please ensure that all NIRB FTP links to appendices are re-labelled, such that: a) they match the TOC, and b) they match referenced links within the main document. If something is called Appendix V5-4A in the TOC and within the text, the link name and document title should correspond to that label.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-32	Please correct typo on page 5-17: "Boulanger et al. (2011) proposed that the population has likely declined due to decreasing calf survival and concomitant reductions in female fecundity, and hunting."	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-33	Request that VSEC community services and infrastructure be assessed for effects	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-34	Request that VSEC Population Demographics be assessed for effects OR request for additional information and comprehensive rationale for why this VSEC was scoped out of assessment altogether.	Request that the Proponent reassess the Population Demographics VSEC does not meet criteria for IRs — more appropriately addressed through technical review comments; however the Proponent is requested to provide a rationale for scoping this VSEC out of its assessment.
KIA-35	Request for explicit identification and incorporation of social, economic, and/or cultural indicators into the socio-economics effects assessment from Traditional Knowledge	Does not meet criteria for IRs – more appropriately addressed through

IR No.	Information Request	NIRB Rationale
	(TK) studies and reports. For example: links between role of geographically significant places like Bathurst Inlet for subsistence economy and/or recreational activities, including historical, present, and potential for future area revitalization; travel routes and lifeway's; role of family/cultural tradition of visiting; boating, fishing, hunting in other communities and in between communities and mine site area; implications for family and community recreation and community well-being etc.	technical review comments.
KIA-36	Request that that this effect (and its potentially adverse aspects) be assessed through the VSEC community services and infrastructure: "Changes to the demand for education and training programs – this effect is defined as increased local demand for accredited education and training programs that results from the provision of employment opportunities associated with the Project."	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-37	Request that the following effect be scoped into the assessment (or explicit rationale for why it was scoped out) since there has been a management plan / enhancement measure created to address it: "Assessment of Project related procurement, and potential capacity to meet Project needs" (Effect falls under VSEC 'Business Opportunity')	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-38	Request that VSEC Community Services and Infrastructure be assessed for cumulative effects assessment	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-39	Request for consideration of potential effect / discussion topic related to increased demand for housing (i.e. community infrastructure changes) and/or community facilities [housing = CWB indicator]	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-40	Request that the following effect be assessed as it links to the VSEC health and community well being (which includes individual, family and community well being):"Potential effects on individual, family, and community health and well-being from workplace and community cross-cultural tensions, conflict, and/or racism."	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-42	Request that effects related to VSEC 'infrastructure and services' be assessed in detail as they interact with effects related to the health and community well being VSEC	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-43	Request to re-characterize the negative element of this effect [individual and family spending] as long term and	Does not meet criteria for IRs – more appropriately

IR No.	Information Request	NIRB Rationale
	continuous - extending past the Project life - as it relates to	addressed through
	Health and Community Well Being VSEC.	technical review
	, c	comments.
KIA-45	ERM reported dustfall results on a monthly basis, however	Does not meet criteria for
	a review of the laboratory chain of custody's indicates that	IRs – no specific request
	samples were exposed for periods between 24 and 41 days	for information is
	and start and finish dates typically did not correlate to the	apparent.
	start and end of the month. We are satisfied that the results	
	meet standards and that sample locations were generally	
	appropriate.	
KIA-46	Dustfall sampling occurred between May and September.	Does not meet criteria for
	No baseline data was collected during winter and spring.	IRs – no specific request
		for information is
		apparent.
KIA-48	Air quality data collected from George Property and	Does not meet criteria for
	Marine Laydown was only collected over a three month	IRs – no specific request
	period.	for information is
IZIA 40	2012 markinglete data callected from only a simple 24 hours	apparent.
KIA-49	2013 particulate data collected for only a single 24-hour	Does not meet criteria for
	sampling period from each of the four sites	IRs – no specific request for information is
KIA-50	No discussion of 2013 air quality results	apparent.  Does not meet criteria for
KIA-30	Two discussion of 2013 an quanty results	IRs – no specific request
		for information is
		apparent.
KIA-51	Uniform increase in metal deposition between 2011 and	Does not meet criteria for
	2012, in some. Increases are not addressed.	IRs – no specific request
		for information is
		apparent.
KIA-52	Seasonal baseline variation not collected.	Does not meet criteria for
		IRs – no specific request
		for information is
		apparent.
KIA-53	Exceedances of maximum annual NO2 concentrations	Does not meet criteria for
	were predicted within the PDA.	IRs – no specific request
		for information is
IZI A E 4	"M. J.11. J TCD 1	apparent.
KIA-54	"Modelled TSP exceedances were observed in which the	Does not meet criteria for
	model has been run assuming no anthropogenic dust control	IRs – more appropriately addressed through
	CORROL	addressed through technical review
		comments.
KIA-55	ERM indicates that as the residual effects are restricted to	Does not meet criteria for
IXIA-33	the LSAs, are reversible and of moderate magnitude the	IRs – no specific request
	overall significance is Not Significant.	for information is
	overan significance is Not Significant.	101 IIIOHHAHOH IS

IR No.	Information Request	NIRB Rationale
	•	apparent.
KIA-58	The proponent is asked to provide an analysis of the additional benefit generated from the extraction of the resources located at the George Lake site. The analysis should consider the additional revenues and costs for the George Lake deposit (economic), and it must also consider the engineering costs and environmental liability during care & maintenance, closure, post-closure periods.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-59	A characterization of shallow permafrost conditions, in particular ground ice distribution, and geothermal parameters (e.g., active layer thickness) are not included in the DEIS. Developer should provide information on the ground ice characteristics within the project area and along the proposed access route corridors.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
	Unknown ground ice conditions do not allow for evaluating the effect of the project on the permafrost environment. Mitigation measures listed in Tables 2.2-1 and 2.2-2 (Vol. 9) are extremely vague considering that some measures proposed may have significant environmental impacts, such as massive use of extra fill material. The ground ice content and the thaw sensitivity of the foundation material control the performance of the design and the environmental impact. The DEIS report does not provide information on the project's foundation conditions that would allow for assessing how the proposed project affects the shallow foundation material and ultimately, the terrain during operation and closure.	
KIA-60	"In 2013, IPCC presented an update on the understanding of climate change. The developer is asked to provide additional information if available or make commitments to include those in the FEIS.	IRs - more appropriately
KIA-61	"The accuracy of material requirements from quarries and borrow sites for all-weather and winter access road construction is unknown from the DEIS, but needs to be known for the FEIS:  The developer should provide an estimate on the vertical alignments, the fill requirements for access roads, site roads and airstrips.  The developer should provide information regarding preliminary design (pre-feasibility study (PFS) of water crossings, such as location, spans and potential crossing foundation type for larger crossings."	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-65	"The DEIS does not discuss the long-term physical impacts of the roads and airstrips. Therefore, the developer	Does not meet criteria for IRs – more appropriately

IR No.	Information Request	NIRB Rationale
	should provide an assessment of the closure design for	addressed through
	their road access and airstrips, and evaluate potential	technical review
	environmental long-term impacts caused by the alteration	comments.
	in	
171 4 70	ground thermal regime and surface conditions."	5
KIA-70	A TIA alternatives assessment is requested.	Does not meet criteria for IRs – more appropriately
		addressed through
		technical review
		comments.
KIA-74	No information is available on the fuel tank foundations.	Does not meet criteria for
	The developer should provide shallow geotechnical	IRs – more appropriately
	conditions of the various fuel storage facilities. Poor	addressed through
	foundation performance could lead to tank leakage.	technical review
		comments.
KIA-75	No information is available on the fuel tank foundations.	Does not meet criteria for
	The developer should provide shallow geotechnical	IRs – more appropriately
	conditions of the various fuel storage facilities. Poor foundation performance could lead to tank leakage.	addressed through technical review
	Toundation performance could lead to tank leakage.	comments.
KIA-77	Table 4-1 describes ARD potential criteria, which outlines	Does not meet criteria for
	that materials with NPR less than 1 are PAG, NPR values	IRs – more appropriately
	between 1 and 3 as uPAG and nPAG as NPR > 3• The	addressed through
	document asserts material with an uPAG classification will	technical review
	be treated as PAG material until a site specific NPR	comments.
	criteria is determined. While this a more conservative	
	approach than an NPR threshold of 2, the following should	
	be addressed: What steps are being taken to refine the	
	Back River NPR criteria?• Some explanation of proposed	
KIA-78	testing scope and methodology would be useful.  The developer is asked to account for siderite by:•	Does not meet evitorie for
KIA-/o	Showing a plot of Ca-NP vs. Sobek NP, whereby those	IRs – more appropriately
	samples with higher Ca-NP values are suggestive of one or	addressed through
	more of the following;• Insufficient acid was added to bulk	technical review
	NP analyses;• A measureable portion of the inorganic C is	comments.
	not generating alkalinity (i.e., presence of Fe- and/or Mn-	
	carbonates, or organic C).• Considering that there may be a	
	lithology-specific trend to higher Ca-NP values.	
KIA-80	Typically, organic Carbon (or TC) is included in site	Does not meet criteria for
	characterization ABA testing to ensure the correlation	IRs – more appropriately
	indicated to the right is supported by analytical data. Why	addressed through
	was this not done? The developer is asked to comment on	technical review
	the sufficiency of SFE tests on overburden samples from the deposit areas in order to adequately assess the	comments.
	possibility of NRD conditions.	
KIA-81	The developer should provide information about the lack	Does not meet criteria for

IR No.	Information Request	NIRB Rationale
	of petrographic analyses on any of the samples to support the R-XRD.	IRs – more appropriately addressed through technical review comments.
KIA-87	Potential seepage from Lytle and Occurrence Lake to Locale 1 and Locale 2 pits will be controlled with impermeable dykes. It is unclear how the dykes will be made impermeable and what the foundation conditions are. Estimates on the seepage rates should be provided, and pending results, seepage management requirements discussed. Geotechnical and talik conditions of the foundation should be provided.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-89	Groundwater inflows to the Llama Pit from the closed talik zone are presented here and elsewhere in the DEIS as negligible. However, it does not appear that groundwater inflows have been quantified and the developer should either provide an estimate or a rationale why these flows can be neglected. In addition, the developer should provide an estimate on the thawing of permafrost from pit walls during operation.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-90	It is stated that active filling of the open pits at closure will occur to reduce generation of acid and the leaching of metals from the exposed pit walls. The developer must provide information about the remaining exposed pit walls once the pit lakes are full.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-91	The developer should provide additional and consistent details on the water management system and related structures. The Proponent should ensure that water management structures do not result in permafrost degradation and related impacts.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-92	Prior to filling the Umwelt pit, the underground portal at the bottom of Umwelt pit will be sealed with a concrete plug. Saline groundwater is expected to fill the underground, and artesian pressures (static water level is just below ground surface) are expected. The developer is asked to provide information on the preliminary design concept for the plug. A time frame for groundwater inflows and estimated underground excavation fill should be provided.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-110	Please add "seepage" as a pathway for pH, nutrient, metals, Cl and CN freshwater indicators and follow through on the analysis. Please add "seepage from TIA" to the bulleted list of activities included under "Mine Contact Water"	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-112	"Please include the following mine phases in the identified EMPs, or provide a rationale as to why not:	Does not meet criteria for IRs – more appropriately

IR No.	Information Request	NIRB Rationale
	<ul> <li>Mine Waste Rock and Tailings MP – add construction, and closure</li> <li>Site Water Monitoring and Management Plan – add Temporary closure and Final Closure</li> </ul>	addressed through technical review comments.
KIA-117	• Fish Offsetting Plan – add to Final Closure "  Please add zooplankton as a biological metric to the AEMP for lakes or provide a rationale for excluding it. Please provide a rationale for the proposed sampling frequency of 2X/yr (April and August) instead of April plus multiple open water samples	Request for zooplankton to be included does not meet criteria for IRs – more appropriately addressed through technical review comments; however Sabina is requested to provide a response regarding the rationale for proposed sampling frequency.
KIA-119	Please include monitoring of dust deposition, including snowpack and associated contaminants in the AEMP	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-121	Please commit to providing a detailed feasibility study of means of reducing GHG emissions from the project which includes: a) alternative supplemental power sources (i.e., Diavik has installed wind turbines); and b) innovative energy conservation methods (many mines are proposing heat capture from the exhaust of diesel power generators) with estimates of potential efficiencies and reductions.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-122	Based on our experience, the non-fish bearing status of the TIA requires further documentation and effort. If any waterbodies are found to contain fish, a Schedule 2 amendment may be triggered. The following points are recommended to ensure that there are no fish-bearing waters in the TIA area	IRs – more appropriately
KIA-124	Based on our review, we would recommend the following to be included in the effects assessment of Umwelt Lake:  1. Model projected declines in lake volume and outlet discharge by season, and to include the wetted habitat loss in the overall Fish Offsetting Plan habitat budget (Vol. 10 CHA 21).  2. Confirm the amount of overwintering habitat in Umwelt lake  3. Model the availability of shallow marginal habitat with and without project effects  4. Address the potential for impacts to round whitefish in Umwelt Lake due to wetted habitat loss.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.

IR No.	Information Request	NIRB Rationale
KIA-125	We recommend that Giraffe Lake has an additional year of fisheries baseline sampling prior to mine construction, as currently only one year exists.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-126	Impacts on aquatic habitat due to the construction and use of roads, water intake structures and boat launches should be included as part of the effects assessment. Further, any habitat that is being lost or permanently altered requires offsetting as part of the Fish Offsetting Plan Vol. 10. Cha 21. It is recommended to include the following details:  • Number of structures being placed in aquatic habitat  • Structure locations and size of footprints  • The type of habitat, including the importance of the habitat to fish  • The magnitude of impact  • The evaluation of the ability of fish to pass at water crossings at all flow levels	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-127	Quantify the wetted habitat loss in all impacted waters and include it in the Fish Offsetting Plan habitat budget	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-128	The estimated change in shallow water habitat should be assessed to ensure no significant effects on fish.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-130	Previous consultations with DFO and current/future consultations with DFO and KIA should be fully documented in the Fish Offsetting Plan	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-131	It is understood that the conceptual plan to introduce anadromous Arctic char to Bathurst Lake will be developed at a later date. As part of this process, we have identified some potential issues which may be considered in the eventual Offsetting Plan:  • Is there a population of anadromous Arctic char overwintering in the Western River already? If yes, what is the population size?  • Is there sufficient information about the Western River barriers, and whether or not there is already a small population of Arctic char that are able to surmount the falls?  • What is the likelihood of Arctic char straying into this	Does not meet criteria for IRs – more appropriately addressed through technical review comments.

IR No.	Information Request	NIRB Rationale
	system and establishing in Bathurst Lake? (refer to other examples e.g. Murdoch et al. 2013. Assessing the food web impacts of an anadromous Arctic char introduction to a sub-Arctic watershed using stable isotopes. Fisheries Mgmt and Ecology 20: 302-314)  • It is feasible to successfully monitor a 20km stretch of river? Where is monitoring proposed?  • How many anadromous Arctic char entering Bathurst Lake annually will be considered a sustainable population?  • What is the contingency plan if anadromous Arctic char are unable to establish within the proposed 6 year monitoring period? Will other offsetting be considered?  • What will the impacts be on Bathurst Lake fish species? Is it possible that introducing anadromous Arctic char will have major impacts on the existing fish community? See Murdoch et al. 2013 for assessing potential effects.  • What opportunities exist for nearby communities to harvest a newly established population here? Are there local summer/winter camps for fishing?"	
KIA-132	In our opinion, the use of an alternative Habitat Evaluation Procedure (HEP) may produce a more representative approach to characterizing habitat loss e.g. see Mount Milligan or Kitsault Projects, BC	Does not meet criteria for IRs – no specific request for information is apparent.
KIA-133	We recommend that the AEMP adds a monitoring site at the Giraffe Lake inflow (TIA outflow) prior to project construction	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-134	We recommend that additional fisheries sampling is conducted in Reference Lake Q prior to project construction	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-135	The 2013 Rascal-Goose spawning and fry rearing survey should be made available for review, and it is recommended that a second year of sampling is completed prior to project construction	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
KIA-136	"The freshwater resources dataset is limiting (0-1 years of data collection) for select locations proposed for future monitoring in the AEMP, or for sites which will be eliminated following project development. Specifically, 1-2 years of further data collection may be required for the noted baseline data collection programs at the following sites:  •Reference B Lake (zooplankton)	Does not meet criteria for IRs – more appropriately addressed through technical review comments.

IR No.	Information Request	NIRB Rationale
110.	•Umwelt Lake (zooplankton)	THE RAUGHAIC
	•Rascal Lake (zooplankton)	
	•Propeller Lake (zooplankton)	
	•Umwelt Lake outflow (periphyton and benthic	
	invertebrates)	
	•TIA outflow (periphyton and benthic invertebrates)	
	•Reference Q Lake (zooplankton, phytoplankton,	
	chlorophyll a, benthic invertebrates)	
	•Lower Long Lake (phytoplankton and chlorophyll a)	
	•McCoy Lake (zooplankton) •Sleigh Lake (zooplankton)	
	•George Lake (zooplankton)	
	•Reference Q outflow (periphyton and benthic	
	invertebrates)	
	•George outflow (benthic invertebrates)	
	Justification for the level of effort identified above is	
	requested so that an assessment can be made about future	
	sampling efforts moving forward."	
KIA-137	Duplication of TK information	Does not meet criteria for
		IRs – no specific request
		for information is apparent
KIA-138	Integration of TK into the Discipline Chapters	Does not meet criteria for
		IRs – no specific request
KIA-139	Role of TK in Project Planning and Design	for information is apparent  Does not meet criteria for
KIA-139	Role of TK in Project Planning and Design	IRs – no specific request
		for information is apparent
KIA-140	Proper use of Inuit Consultant quotes	Does not meet criteria for
	1	IRs – no specific request
		for information is apparent
	Government of Nunavut	
GN-2	The GN-DOE requests clarification on additional projects	Does not meet criteria for
	that may eventually become part of this license (through an	IRs – more appropriately
	amendment or alternative process) as well as a description	addressed through
	of the likelihood (based on the best available information)	technical review
GN-3	that they may become a part of this project.  The GN-DOE requests Additional information on the	comments.  Does not meet criteria for
011-3	likelihood of the construction of a winter road connecting	IRs – more appropriately
	the Project to the Tibbitt Contwoyto Winter Road and what	addressed through
	rubric/measure would be used to determine if the road	technical review
	would be constructed, and how often it would be used	comments.
	(trucks per year and number of years).	
GN-4	The GN-DOE requests further information on construction	Does not meet criteria for
	and maintenance descriptions associated with a winter road	IRs – more appropriately
	connecting the Project to the TCWR. More specifically,	addressed through

IR No.	Information Request	NIRB Rationale
	Sabina is requested to confirm whether or not it intends to use or may potentially use chemical application or granular (i.e. sand and gravel) deposition on winter road sections that occur on water bodies, specifically water bodies that may affect the Back River.	technical review comments.
GN-5	The Nunavut Research Institute requests further clarification on the inclusion of a biophysical environmental effects monitoring framework in the FEIS to	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-6	The Nunavut Research Institute requests further information on the community based monitoring (CBM) to be developed as part of the community involvement plan. This should include information on the scope of monitoring (VECs, VESCs to be addressed), questions to be answered through CBM, who will be consulted, how the monitoring programs will be developed, and when the programs will be initiated.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-15	The GN-DOE requests that results from the 2012 caribou population survey be included in Table 5.1-2: Bathurst Caribou Herd Population Numbers and Breeding Females from 1986 to 2009.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-20	The GN-DOE requests further clarification on whether bulk fuel storage will include overwintering of fuel vessels in sea ice. Further information is required on methods for monitoring fuel volumes, the preciseness of these measurements, and fuel leak detection methods. The GN-DOE requests clarification on site-specific spill response plans including response time as well as required personnel and equipment.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-21	The GN-DOE requests the Proponent elaborate on proposed measures to mitigate impacts on grizzly bears and provide a Grizzly Bear-Human Deterrent and Bear Safety Plan.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-22	The Government of Nunavut requests the Proponent review and revise Table 3.5-5 and the associated text in order to avoid confusion.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-23	The Government of Nunavut requests the Proponent review and revises Table 3.5-5 and the associated text.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.

IR No.	Information Request	NIRB Rationale
GN-24	The Government of Nunavut requests the following subsections of Volume 8, Section 3 be updated with the most current data (National Household Survey, 2011 Census, etc.) available: 3.1.2.2 Employment 3.1.2.3 Education and Training http://www.stats.gov.nu.ca/en/Census%202011NHS.aspx	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-25	The Government of Nunavut requests the Proponent provide more detail regarding the process for implementing changes to the Back River monitoring program.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-26	The Government of Nunavut requests that the Proponent re-evaluate and correct any errors in Volume 8 Table 3.5-8 and on page 3-49. It is encouraged that Sabina review and verify its calculations for the entire DEIS to avoid similar errors.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-29	The Government of Nunavut requests that Sabina assess the risk of communicable disease and STIs occurring at the project site, as well as discuss the potential for sexual harassment and abuse to occur onsite. This should include a discussion of how on-site health services will prevent and/or mitigate these risks.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-30	The Government of Nunavut requests that Sabina assess the negative impacts on the mental health of project employees and their families due to potential challenges in adjusting to rotational work schedules and workplace conditions. This should include a discussion of whether substance abuse is a potential outcome of coping with the challenges of rotational work and worksite conditions for employees and their family members.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-34	The Proponent can only develop thorough and effective mitigation measures if there is a clear understanding of the baseline housing situation in the Kitikmeot Region. The Government of Nunavut requests a re-evaluation of this statement to include a regional breakdown of where new units are constructed.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-35	The Government of Nunavut requests that the proponent re-evaluate the potential for in-migration to the Kitikmeot region, specifically, Cambridge Bay and Kugluktuk, considering the projected increases in project induced, indirect, or direct employment.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-36A	The Government of Nunavut requests that more up to date information on NHC's annual budget be used in the EIS. NHC is able to provide Sabina with the most up-to-date annual budget figures as needed.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.

IR No.	Information Request	NIRB Rationale
GN-36B	The Government of Nunavut requests the Proponent remain consistent with the number of archaeological sites presented for each management area. Ensure the consistency is found across these following documents.  Volume 8 – Executive Summary Volume 8 – Section 1.5  Appendix V8-1A – Archaeological Sites within the LSA and TCWR Winter Road Connector Assessment Area Appendix V8-1B – Back River Project: Cumulative Heritage Baseline Report 2013	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-37	The Government of Nunavut requests the proponent provide a list of site types included in these paragraphs as a table. A single table presenting the site types listed in this section would be sufficient. For instance, in this document sites are classified according to the following categories: Grave site, Habitation site, Hunting site, Storage site, Isolated find, Etc Similar tables could also be presented for the data provided in Sections 1.5.2.1 and 1.5.2.2.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-39	Since the significance criteria is well presented in Appendix V8-1B (Page 3-1) the Government of Nunavut recommends the Proponent review and reconcile the information for Volume 8, Section 1.5.2.4.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GN-41	The Government of Nunavut requests that tables be used to present a summary of the number of sites classified by 1) cultural types (ex: Dorset 6, Paleo-Eskimo 13, etc.) and 2) artifact types (ex: scrapers 6, quartz flakes - 4, etc.).	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
	Aboriginal Affairs and Northern Development (	Canada
AANDC-3	AANDC requests the Proponent clarify that the approach used to determine spatial effects included consideration for the extent of potential project effects and not just project activities. If this is the case, the first bullet of Sec. 1.2.3.2 should be revised to read, "the physical or socio-economic extent of project activities and potential measurable effects of those project activities".	addressed through technical review comments. Sabina is requested to provide the clarification regarding approach as requested.
AANDC- 7	AANDC requests the Proponent provide the findings of the geotechnical testing programs of the 2012-2013 seasons. This will include: geotechnical characterization, field and laboratory test results, rock mass characteristics and joint sets (both observed and assumed).	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 17	AANDC requests the Proponent provide information about the quality of the effluent and the discharge periods, location and other relevant details. Alternatives (i.e. recycling the RBC effluent) should be explored and	The Proponent is requested to provide additional information regarding quality of effluent and

IR No.	Information Request	NIRB Rationale
	presented.	discharge periods, location and details; however the request for additional alternatives assessment does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC-19	AANDC requests copies of the following background reports for review of methodologies, data quality and data limitations:  ALS Metallurgy. 2013. Metallurgical Assessment of Back River Gold Project, Nunavut, Canada. Report # KM3589. ALS Metallurgy: Kamloops, BC.  Lorax Environmental Services Ltd. 2007. Initial Back River Waste Rock Characterization Program. Prepared for Dundee Precious Metals Inc. by Lorax Environmental Services Ltd.: Vancouver, BC.  Rescan. 2011. Back River Project 2011 Metal Leaching/Acid Rock Drainage Report. Prepared for Sabina Gold & Silver Corp. by Rescan Environmental Services Ltd.: Vancouver, BC.  Rescan. in prep. Back River Project: 2007 to 2013 Metal Leaching/Acid Rock Drainage Baseline Report. Prepared for Sabina Gold & Silver Corp. by Rescan Environmental Services Ltd.: Vancouver, BC.  Knight Piésold Ltd. (2013d). "Back River Project: Groundwater Mine Inflows". Cont. No. VA13-01716. October 2013.  Rescan (2010), "Thermistor Data Summary, Back River Project". Memorandum prepared for Sabina Gold and Silver Corporation. 27 October 2010.  Rescan (2013), "Back River Project, 2007 to 2012 Metal Leaching/Acid Rock Drainage Baseline Report" June 2013.  Knight Piésold Ltd. (2013e). "Back River Project - Waste Rock Disposal Criteria for Pre-Feasibility Study". Cont. No. VA13-00881.  Analysis of samples taken from the George Property (XRD, XRF, Leachate and Humidity Cells) are "proposed for fall 2013" – are these results available?	The NIRB notes that some information requested may not be publicly available and that the provision of raw data is at the discretion of the Proponent.
AANDC-	AANDC requests the Proponent provide an analysis of	Does not meet criteria for
23	potential difference in permafrost depth under coarse rock cover (above grade) vs. native tundra with respect to adequacy of the cover to maintain permafrost conditions	IRs – more appropriately addressed through technical review

IR No.	Information Request	NIRB Rationale
	throughout the covered PAG waste rock piles.	comments.
AANDC- 24	AANDC requests the Proponent provide an estimate of the ARD/ML generation that could arise from partial or full oxidation of the PAG in the WRSAs (including timelines with respect to global warming). Also, provide a description of the means to collect and treat the ARD/ML at both the Goose and George properties, given physical and economic site constraints post-closure, and demonstrate that allowance for the collection and treatment facilities have been incorporated into the site design.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 25	AANDC requests the Proponent identify traditional and current sources of drinking water for Nunavummiut and assess potential project impacts, if possible.	Request for identification of traditional and current sources of drinking water represents an IR; however the request to assess potential impacts to these does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 26	AANDC requests the Proponent make the background technical reports (containing all data) available for the technical review.	The NIRB notes that some information requested may not be publicly available and that the provision of raw data is at the discretion of the Proponent.
AANDC- 27	AANDC requests the Proponent make the background technical reports (containing all data including calibration data) available for the technical review.	The NIRB notes that some information requested may not be publicly available and that the provision of raw data is at the discretion of the Proponent.
AANDC- 28	AANDC requests the Proponent explicitly compare winter water chemistry data for Propeller and Goose lakes and evaluate potential for biologically-relevant effects in Goose Lake.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 30	AANDC requests the Proponent provide an operational plan and water balance to document how the minimum water levels within Goose and Propeller Lakes will be maintained.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 31	"AANDC requests the Proponent provide quantitative calculations or modelling of the volumes of groundwater inflowing into mines over time, where mines encroach on	Does not meet criteria for IRs – more appropriately addressed through

IR No.	Information Request	NIRB Rationale
	lakes with depths of more than 1.3m of water.	technical review comments.
AANDC- 32	AANDC requests the Proponent provide project specific quantitative estimates of ground water inflows, including the underground mine, and include these estimates in the GoldSim model water balance calculations. Inflow volume calculations should be multiplied by anticipated groundwater quality concentrations to determine inflow groundwater contaminant loadings, which will require treatment and disposal.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 36	AANDC requests the Proponent resolve the apparent contradictory statements made in this section by providing the assumptions, methodology, hydrogeologic flow analyses, data summaries, and technical findings in sufficient detail to adequately support the conclusion that minimal connection exists between near-surface and deeper groundwater within the proposed open-pit and underground mining operational areas. AANDC also requests the Proponent provide detailed fracture flow analyses to determine groundwater flow characteristics, and potential fate and transport implications.	Does not meet criteria for IRs – appears to be initial technical review comments.
AANDC- 37	AANDC requests the Proponent provide the assumptions, methodology, landform and permafrost mapping, data summaries, and technical findings in sufficient detail to adequately understand how this hydrogeologic system and permafrost thermodynamics will be affected by, and place constraints upon, the proposed open-pit and underground mining operations.	Does not meet criteria for IRs – appears to be initial technical review comments.
AANDC- 38	AANDC requests the Proponent provide detailed soil and permafrost-related landform mapping, tabulated data summaries, and technical findings in sufficient detail to assess their distribution, frequency, and potential structural instability, problematic settlement, and thermal erosion relative to the proposed Project development and ongoing operations.	IRs – more appropriately
AANDC- 39	AANDC requests the Proponent provide available date from in-ground thermistor profiles of sufficient number and appropriate location to adequately represent, assess, and support their predictive talik geothermal modeling within the Project area. Technical data and analysis of long-term blast effects on the subsurface environment are also requested.	Does not meet criteria for IRs – more appropriately addressed through technical review comments. Provision of raw data is at the discretion of the Proponent.
AANDC- 40	AANDC requests the Proponent present its permafrost- related geothermal analyses after incorporating more conservative assumptions that contemplate actual year- round effects on permafrost degradation.	Does not meet criteria for IRs – more appropriately addressed through technical review

IR No.	Information Request	NIRB Rationale
222 2 (00	211071111107111111111111111111111111111	comments.
AANDC- 41	AANDC requests the Proponent present an evaluation of potential impacts of thermal erosion, permafrost aggradation and degradation, soil stability, and differential settlement consequences to waste water management, tailings impoundment, road construction, building foundations, etc. associated with the Project. For all potential impacts, AANDC requests the Proponent propose effective mitigation measures.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 43	AANDC requests the Proponent provide documentation relating to "resiliency" of this particular type of shallowwater Arctic marine ecosystem and recovery after a disturbance.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 44	AANDC requests the Proponent provide evidence that there is sufficient information or methodology to predict long-term residual effects on the water quality from contaminants stored in the sediments.	Does not meet criteria for IRs – appears to be initial technical review comments.
AANDC- 47	AANDC requests the Proponent provide the required background information pertaining to the design and effectiveness of landfills and otherwise managing waste in relation to the context of the project during the DEIS review phase.	As the Proponent has specified this would be provided within the FEIS, this does not meet criteria for IRs — more appropriately addressed through technical review comments.
AANDC- 55	AANDC requests the Proponent provide response procedures and expected conditions outside the MLA in other marine and waterway areas, particularly in relation to seasonal limitations.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 56	AANDC requests the Proponent provide information outlining management investigation and resolution process for the investigation and management of incident, accident and malfunctions.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 61	AANDC requests that Sabina provide any information collected to date on consultation processes and community preferences related to each option in the alternatives assessment. For example, this could include a table summarizing the opinion of the stakeholders and communities with regards to each alternative as well as how these opinions were weighed in the assessment of alternatives. AANDC also requests the Proponent update this information based on future consultations for the FEIS.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.

IR No.	Information Request	NIRB Rationale
AANDC-	AANDC requests that the Proponent provide meeting	The NIRB does not require
62	information related to meetings mentioned in the table of	Sabina to produce any
	Appendix V3-1A "Record of Meetings with Community	information in responding
	and Stakeholder Groups". These include for example: -	to the IR that it reasonably
	Local hunters from Cambridge Bay (2012-11-30+12-01)	considers to be
	Cambridge Bay Community Advisory Group (2013-02-05)	confidential or that raises a
	- Selected elders and knowledge holders Cambridge Bay	privacy concern.
	(2013-08-21+23) - Local hunters from Kugluktuk (2012-	
	11-27) - Kugluktuk General public (2013-08-13) - Selected elders and knowledge holders Kugluktuk (2013-08-14+16)	
	- Various residents of Kingaok (2013-11-18) - Local	
	hunters from the Bathurst Inlet area (2012-11-30+12-01) -	
	Selected elders and knowledge holders from or familiar	
	with the Bathurst Inlet area (2013-08-14+16 and 08-	
	21+23) - Various residents of Omingmaktok (2013-11-18)	
	- AANDC also requests that the Proponent provide details	
	and outcomes of all public meetings, stakeholders	
	meetings and other consultation events that may have	
	occurred since the DEIS submission.	
AANDC-	AANDC requests that the Proponent provide additional	The NIRB does not require
63	information on who attended Public meetings and other	Sabina to produce any
	events (e.g. men, women, youth, elders, representatives	information in responding
	from various organizations, etc.) and generally who made comments at these events.	to the IR that it reasonably considers to be
	comments at these events.	confidential or that raises a
		privacy concern.
AANDC-	AANDC requests that the Proponent provide a summary of	The NIRB does not require
64	the concerns expressed by the public that cross-references	Sabina to produce any
	where they were considered/incorporated.	information in responding
		to the IR that it reasonably
		considers to be
		confidential or that raises a
AANIDO	AANIDO managa da da D	privacy concern.
AANDC-	AANDC requests that the Proponent provide, for the	The NIRB does not require
03	Technical Review, methods and results of TK workshops conducted for the project.	Sabina to produce any information in responding
	conducted for the project.	to the IR that it reasonably
		considers to be
		confidential or that raises a
		privacy concern.
AANDC-	AANDC requests that the Proponent provide a synthesized	The NIRB does not require
66	summary or road-map of where specific TK was utilized	Sabina to produce any
	throughout the EIS in areas such as baseline data	information in responding
	collection, impact prediction, significance assessment and	to the IR that it reasonably
	the development of mitigation and monitoring programs.	considers to be
	The synthesis should use specific examples where	confidential or that raises a

IR No.	Information Request	NIRB Rationale
	possible.	privacy concern.
AANDC- 67	AANDC requests that the Proponent provide an overview in the DEIS of the number and type of each position anticipated in the DEIS. Additionally, AANDC recommends that the Proponent provide a summary of the information contained on the website pertaining to job requirements in the DEIS itself.	The Proponent is expected to respond to the request for details however revisions to text within the DEIS does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 68	AANDC requests that where possible the Proponent provide an assessment of the socio-economic positive residual effects.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 69	AANDC requests that the Proponent update socio- economic baseline information to the most recent data found from Statistics Canada, the Fall 2013 Kitikmeot Socio-Economic Monitoring Committee report, the Nunavut General Monitoring Plan and the Nunavut Bureau of Statistics. Any updated data should be compared to previous data to determine if a trend exists. Subsequently AANDC asks that the Proponent reassess the impact assessment to determine if updates to socio-economic data produce different socio-economic impact results.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC-70	AANDC requests that the Proponent further describe in the DEIS any strategic partnerships and the support and commitment that Sabina will provide to meet the training requirements of the Project. The Proponent should also discuss how this support will fulfil training needs of the Project.	The Proponent is expected to respond to the request for details however revisions to text within the DEIS do not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 71	AANDC requests that the Proponent further describe in the DEIS continuing education practices and on-the-job training (organizational responsibilities, resources, and anticipated programming).	The Proponent is expected to respond to the request for details however revisions to text within the DEIS do not meet criteria for IRs — more appropriately addressed through technical review comments.
AANDC- 72	AANDC requests that the Proponent describe the preferential recruitment policy, gender equality policy and pay schedules in the Human Resources Plan section of the	The Proponent is expected to respond to the request for details however

IR No.	Information Request	NIRB Rationale
	report.	revisions to text within the DEIS do not meet criteria for IRs – more appropriately addressed through technical review comments.
AANDC- 73	AANDC requests that the Proponent provide details in the DEIS on measures that will be taken to assist employees during periods of lay-offs associated with temporary or premature closure, as well as care and maintenance periods.	The Proponent is expected to respond to the request for details however revisions to text within the DEIS do not meet criteria for IRs — more appropriately addressed through technical review comments.
AANDC- 74	AANDC requests that the Proponent consider a commitment in the EIS to continue collaborative socio-economic monitoring during periods of temporary, premature or care and maintenance phases in order to understand any impacts these phases may have on communities and what organizations can do to collaboratively mitigate impacts. This commitment should recognize that the socio-economic monitoring program may need to be adapted depending on the circumstances of the project.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
	Environment Canada	
EC-3	EC requests that the Proponent complete an air assessment of air emissions from the MLA. The assessment should include air emissions from on land sources and ship emissions during "hoteling" and during transport.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
EC-4	EC requests that the Proponent provide all input and control files used in the CALPUFF model and post processing utilities to generate the air quality predictions presented in the DEIS. All files should be in a format that can be entered directly into CALPUFF. Please include all output files in the raw CALPUFF format.	The NIRB notes that the provision of raw data is at the discretion of the Proponent.
EC-9	EC requests that the Proponent include a discussion of the key marine habitat sites that are near the proposed shipping route in Subsection 6.11 of Volume 7 or in the Spill Contingency Plan as to how potential spills, chronic shipbased pollution and cumulative disturbance to migratory birds and their habitat from vessels will be mitigated at these sites. EC also requests that Subsection 11.2 of the Shipping Management Plan discuss measures to mitigate impacts to important areas for migratory birds along the	Does not meet criteria for IRs – more appropriately addressed through technical review comments.

IR No.	Information Request	NIRB Rationale
	proposed shipping route.	
EC-11	EC requests that the Proponent provide the referenced "Waste and Water Management Pre-feasibility Study Report" by Knight Piésold Ltd., 2013.	The NIRB notes that some information requested may not be publicly available.
EC-12	"EC requests that the Proponent:  1) Provide further information on the proposed design of runoff collection ponds at the George site. A comprehensive analysis of climate change predictions should be incorporated into the design of the project's component parts, with consideration for life-of-project through to closure.  2) Provide further details/clarity on how the Proponent will incorporate potential extreme precipitation events into the design of collection ponds at both the Goose and George properties.  3) Provide information on contingency planning if the volume of the collection ponds is found insufficient."	The request in item 1 for a comprehensive analysis of climate change predictions does not meet criteria for IRs – more appropriately addressed through technical review comments.  The request in item 1 for further information on the proposed design of runoff collection ponds at George site, and items 2 and 3 are allowable as IRs and a response should be provided.
EC-13	"EC requests that the Proponent:  1) Highlight in detail how the TIA design accounts for the potential impacts of climate change.  2) Identify whether the Proponent has accounted for other changes associated/identified with climate change on the TIA such as increased precipitation, high wind and changing mixing patterns/fetch size, which may have effects on TIA storage capacity, tailings settling times (settling out of the supernatant), variations in ice formation (and possible tailings entrainment), etc. Please outline these considerations and highlight contingencies for such effects."	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
EC-16	EC requests that the Proponent clearly indicate the estimated quantities of all types of mine wastes to be generated (overburden, PAG and nPAG waste rock and tailings) in the draft EIS.	The Proponent is expected to respond to the request for details however revisions to text within the DEIS do not meet criteria for IRs — more appropriately addressed through technical review comments.
EC-17	EC requests that the Proponent add information on the Overburden, Waste Rock Areas and Ore Stockpiles proposed for the Goose Property to Subsection 6.6 of Volume 2.	Does not meet criteria for IRs – more appropriately addressed through technical review

IR No.	Information Request	NIRB Rationale
	•	comments.
EC-18	EC requests that the Proponent revise this section to include information on the design of water management structures for seepage and runoff control for the open pits, as per the section heading.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
EC-20	EC requests that the Proponent add in a reference to the requirement to meet the MMER should the mine's discharge be subject to the Regulations.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
EC-22	EC requests that the Proponent provide, as part of Figure 5-2, the estimated quantity of seepage to be returned to the TIA.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
EC-23	EC requests that the Proponent clearly label the locations of the PAG and nPAG waste rocks in the WRSAs in the relevant figures in the draft EIS.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
EC-25	EC requests that the Proponent acknowledge that any runoff from the mine site during site preparation and construction would be considered an effluent under the MMER if it exceeds the threshold flow rate of 50 m3/day. If it occurs, then the Proponent would be required to meet a TSS limit of 15 mg/L (maximum monthly mean concentration) and 30 mg/L (maximum concentration in a grab sample) for the site runoff under the MMER.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
EC-27	EC requests that the Proponent use the same classification scheme for the waste rock (Table 1.2-1) and tailings.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
	Fisheries and Oceans Canada	
DFO-1	DFO requests the results of the Freshwater Fish and Fish Habitat 2013 Baseline Studies.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
DFO-7	DFO requests that a framework for this monitoring program be provided which includes potential mitigation and adaptive management options.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.

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DFO-8	DFO requests the following baseline surveys, LGL Limited 2005, LGL Limited 2007, Rescan 2013 (unpublished).	The NIRB notes that some information requested may not be publicly available and that the provision of raw data is at the discretion of the Proponent.
	Natural Resources Canada	
NRCan-3	b. Although there are numerous lakes in the region, most cannot be classified as "kettle lakes connected by streams" (i.e. Volume 5, Section 3) but can be characterized as lakes and depressions formed by glacial scour Please clarify/correct the terminology used in the DEIS. h. On Figure 4.2-1 (Appendix V5-3A), the directions for the esker trends are mostly incorrect. They should point generally northward, parallel to the general orientation of the streamlined forms. See Glacial Map of Canada (Prest, V K; Grant, D R; Rampton, V N, Geological Survey of Canada, "A" Series Map 1253A, 1968; 1 sheet, 1:5,000,000).  i) The contouring is misleading in the "Total Metals" geochemical maps (Volume 5, Section 3) because soil samples were collected at low and/or variable density. The metal distribution maps should be represented as proportional dot plots or by other means. Additional samples would need to be collected to properly characterize the nature of the overburden above and in the vicinity of the open pits, and to assess regional trends	Items a, c, d, e, f, g, and j require a response to IRs. Items b, h, and i do not meet criteria for IRs — more appropriately addressed through technical review comments.
NRCan- 17	before making contour maps.  As the permafrost encapsulation of PAG wastes is a key component of the post closure management of the site, the proponent should provide:  b. An alternate post closure waste management strategy to mitigate climate change impacts should there be considerable uncertainty in the thermal model predictions of permafrost conditions at the site.	Items a and c are allowable as IRs; however item b does not meet criteria for IRs – more appropriately addressed through technical review comments.
	Transport Canada	
TC-1	The Proponent should provide a list of which vessels, past, present and future, that are interfacing with Bathurst Inlet.	Do not meet criteria for IRs — information requested is not within the scope of the NIRB's Review.
TC-3	The Proponent is requested to make reference to the AWPPA in the section related to pollution prevention as the vessels transiting to/from and employed within the port are required to comply with the Act in addition to the Canada Shipping Act, 2001 (CSA 2001).	Does not meet criteria for IRs – more appropriately addressed through technical review comments.

IR No.	Information Request	NIRB Rationale
TC-4	The Proponent is requested to provide plans including contacting Canadian Hydrographic Services to carry out the proper bathymetric survey of the area in order to ensure safety of vessels, crew and the environment.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
TC-5	The Proponent is requested to provide a revised and updated OPEP to reflect planned transfer operations and to include missing appendices in order to effectively evaluate the plan. The Proponent must ensure that the requirements of the CSA 2001 Part 8, the relevant regulations and standards outlined below can be met prior to commencing this Project and throughout the Project life: • Response Organization and Oil Handling Facility Regulations • Vessel Pollution and Dangerous Chemicals Regulations • Environmental Response Arrangement Regulations • Oil Handling Facilities Standards (TP 12402) • Release and Environmental Emergency Notification Regulations	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
TC-6	The proponent should provide an assessment of any potential impacts to navigation resulting from the construction, operation or maintenance of these proposed reefs.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
TC-9	A more appropriate title for this section is "Surveillance Procedures".	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
TC-10	Amend to add The Transportation of Dangerous Goods Act, 1992	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
TC-11	Amend to add The Transportation of Dangerous Goods Regulations	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
TC-12	Amend to add The Transportation of Dangerous Goods Regulations	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
TC-13	Amend to add The Transportation of Dangerous Goods Act, 1992	Does not meet criteria for IRs – more appropriately addressed through technical review

IR No.	Information Request	NIRB Rationale
		comments.
	Government of the Northwest Territories	
GNWT- 2	2) Please provide an assessment of the indicators chosen to evaluate impacts on land use including "changes in access to land and resources", "changes to the experience of the natural environment" and "changes to the abundance and distribution of resources" as they relate to harvesters in the NWT.	Item (2) does not meet criteria for IRs – more appropriately addressed through technical review comments.
GNWT- 5	Please provide an energetics-based quantitative assessment of impacts to the reproductive potential on Bathurst, Beverly, and Ahiak caribou herds using the herds' annual range as the geographic scope and including the consideration of stress related to environmental conditions as well as to interactions with human development.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
GNWT-7	To Government of Nunavut:  1) Please provide a summary of wildlife monitoring and cumulative effects initiatives being undertaken by the GN and wildlife co-management partners in the Kitikmeot region.  2) Is the GN willing to participate in regional initiatives including the Bathurst Range Planning process and the development of a regional cumulative effects monitoring programming for wildlife and wildlife habitat in the Slave Geological Province?  3) Is the GN willing to discuss potential collaborative approaches for developing new processes or aligning existing programs and processes to address cumulative impacts to other shared caribou herds and species in the region?  4) Is the GN willing to include GNWT in discussions with Sabina regarding options for research and monitoring related to cumulative effects assessment and management of shared species?	Items 2, 3, and 4 do not meet criteria for IRs — information requested is not within the scope of the NIRB's Review; however the Government of Nunavut may choose to provide a response to these questions with its response to item 1.
GNWT- 7B	To Sabina Gold and Silver Corp.:  1) Is the proponent committed to continue participating in GNWT, Department of Environment and Natural Resources (ENR) hosted meetings to further work on the Bathurst Range Planning process and other range planning processes?  2) Is the proponent committed to continued participation in ENR hosted meetings towards the development of regional cumulative effects monitoring for the Slave Geological Province and to include potential research and monitoring directions arising from that initiative and others into its Wildlife Effects Monitoring Program (WEMP)?  3) Is the proponent willing to discuss options for	Not an information request, however the Proponent may choose to provide a response to the questions raised.

IR No.	Information Request	NIRB Rationale
1 1172	integrating collaboratively with ongoing regional monitoring of grizzly bear and wolverine being conducted by diamond mines in the NWT and consider other collaborative monitoring initiatives as they arise?	
	Dene First Nation	
LK-01	That the proponent provides a more in-depth analysis of the alternative of delaying the project; including, but not limited to, expected market prices that will impact feasibility, community considerations that impacted this decision, and why delaying the project was ruled out, beyond economic reasons.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
LK-02	That the proponent includes areas outside of the footprint as potentially impacted caribou habitat and comment on how this potentially significant caribou habitat will be affected by the development.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
LK-03	Include Bathurst caribou in the evaluation of direct mortality and injury as it relates to the winter road connector.	IRs – more appropriately addressed through technical review comments.
LK-04	That the proponent includes health impacts as an indirect form of mortality, and create a mitigation strategy to avoid degradation of caribou health.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
	Yellowknives Dene First Nation	
YKDFN 1-1	- Utilizing climatic variability scenarios. Please indicate the potential changes in traffic frequency/duration if there are short hauling seasons (e.g. warm winters) when the TCWR connector is required (with all 4 diamond mines in construction/production) and what the potential impacts may be.	Items a, b, and c represent IRs and require a response. Item (d) does not meet criteria for IRs – more appropriately addressed through technical review comments.
YKDFN 2-1	Please provide a map that illustrates sensitive wildlife areas in the PDA.	Does not meet criteria for IRs – more appropriately addressed through technical review comments.
YKDFN 2-3	Please provide an updated approach to caribou behavior monitoring or a clear rationale as to why this does not need to be a key part of the monitoring approach.	Request for updated approach does not meet criteria for IRs - more appropriately addressed through technical review comments. The Proponent is requested to provide a

IR No.	Information Request	NIRB Rationale
		rationale for not including
		this in monitoring
		approach, if applicable.
YKDFN	Please assess the potential likelihood of interactions	Does not meet criteria for
2-5	between caribou migrating north and the operational	IRs - more appropriately
	window of this road. In particular, please assess the	addressed through
	potential impacts on movement of the herd, including	technical review
	during the migration.	comments.
YKDFN	Please provide a figure that shows the relative sizes of this	Does not meet criteria for
4-3	project with others used in the cumulative effects analysis	IRs - more appropriately
	as well as Tyhee, Fortune and Avalon's mine proposals.	addressed through
	Secondly, please provide examples of where the project	technical review
	made choices to conserve caribou habitat rather than	comments.
	functionality or cost. For these examples, please show how	
	the value of the habitat was accounted for within the trade	
	off analyses.	
YKDFN	Please provide a discussion that considers how additional	Does not meet criteria for
4-5	development(s) may prolong the recovery of the Bathurst	IRs - more appropriately
	Caribou herd and the impacts to Dene harvesters that are	addressed through
	already sacrificing their connections to caribou due to	technical review
	population decline.	comments.