

Section	Commenter	Comment	Action	Rationale
Comments on the <i>Draft</i> EIS Guidelines Document Submitted Regarding Draft EIS Guidelines – November 9, 2012				
Scope: Section 7	EC	The monitoring programs proposed by the Proponent to identify and manage ecosystemic and socio-economic interests potentially affected by the Project – The proponent states that "The scope of the assessment will include any programs that will be established to monitor the potential ecosystemic and socio-economic impacts caused by the proposed project components and activities. In order to describe how the monitoring programs will manage those interests, EC suggests that the proponent include proposed adaptive management measures that will identify critical thresholds at which time the mitigative actions would be implemented.	No change	Not a fit in the Scope, but already included in the Guidelines Section 9.1 Environmental Management Plan.
Glossary	KIA (Issue 2)	Glossary, page vii: The definition of “rock glacier” is not scientifically accurate. The definition includes the words “...ice about a meter below the surface.” Recommendations: Suggest changing the definition to “A geomorphological landform composed of rock fragments and finer material, containing either an ice core or cemented by ice that shows evidence of past or present downslope movement by creep or deformation under the influence of gravity.”	Change incorporated	Alternate definition incorporated that is referenced, more thorough and uses plain language incorporated.
List of Acronyms	KIA (Issue 3)	List of Acronyms, pages ix- x: The following acronyms were not defined: NO _x : Nitrous oxides, SO ₂ : Sulphur dioxide, and VOC: Volatile Organic Compound	Change incorporated	
General Comment	TC	Please include in the EIS Guidelines a requirement for the following information that Transport Canada will require to assess the potential impacts. Potential areas of interest to Transport Canada (TC) – Navigable Waters Protection Program could include, but are not limited to, any works built or placed in, on, over, under, through or across a navigable waterway. Examples of works include but are not limited to bridges, booms, dams and causeways. In addition, please provide detailed information on the waterways impacted by the proposed deposition of tailings to determine whether or not the Navigable Waters Protection Act (NWPA) applies, and details of any anticipated impacts to navigation on these waterways.	Further detail added due to suggested change	Generally noted already in Sections 6.6.4 Ground Transportation and Associated Water Crossings, but additional details added to Sections 9.4.6 Mine Waste Rock and Tailings Management Plan, 9.4.10 Roads Management Plan and 9.4.11 Shipping Management Plan.
Section 2.4.1 and Section 2.9.3.3	TC	Page 62 and 89: The Proponent proposes that year-round fuel storage during Phase 2 construction may be split between an iced-in Arctic class ice-rated double-hull vessel at Roberts Bay and land based tanks. The Proponent has proposed to utilize Accommodation Barge at Roberts Bay in order to house workers. Vessels that overwinter and Accommodation Barges are subjected to requirements of the <i>Canada Shipping Act, 2001</i> , <i>Arctic Waters Pollution Prevention Act</i> and their associated regulations. The Proponent is to provide specific details about the vessel, the project, and the plan as to how fuel storage and transfer operations will be carried out by that vessel. The Proponent to provide details in regards to Accommodation Barge. Details to include vessel particulars, intended purpose, planned mooring arrangement and compliance with CSA 2001 and AWPPA. Marine Safety notes that components related to overwintering of fuel vessel and accommodation barges are not included in the draft EIS guidelines.	Change incorporated	Added further detail to information requested in Section 6.6.5 Marine Shipping
Section 3.5.2. Section 3.5.3 and Section 3.5.5	TC	Page 172,173 and 174: Three preferred alternatives are proposed: - a dock for servicing large deck barges with heavy loads; - a dock for servicing deep-draft vessels like container ships and fuel tankers; and - an offshore mooring system for unloading fuel. TCMS requests specific details in regards to the proponent's plan to have additional and/or alternative port facilities. The Proponent is to include bathymetric information and specific ships routing to accommodate planned vessels	No change	Already in Section 6.6.2 Mine Site Tank Farm(s), Roberts Bay Port and Storage Facility.

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Section 2.9.3.3 and Section 2.9.3.4	TC	The Proponent is required to submit Oil Pollution Emergency Plan/Oil Pollution Prevention Plan (OPEP/OPPP) for all planned Oil Handling Facilities.	No change	Already in Section 6.6.9 Fuel and Explosives Facilities, bullet 4
Section 2.9.3.3 and Section 3.5.2	TC	All vessels transiting through and operating in Canadian Arctic waters are required to comply with the Arctic Waters Pollution Prevention Act (AWPPA) the Canada Shipping Act (CSA 2001). The Proponent is to confirm that vessels utilized confirm to regulatory requirements.	No change	Detail included in Section 6.6.5 Marine Shipping
Section 6.3 Future Development,	KIA (Issue 6)	2nd paragraph, page 16: NIRB requires the Proponent to “...discuss how any foreseeable future development scenarios have been taken into consideration when designing the infrastructure and ancillary utilities for the Project. The Proponent’s assessment of cumulative impacts of the Project shall also include the future development scenarios as outlined above.” Recommendations: NIRB should clarify or confirm that this guideline is limited to HBML providing their future development plans in the belt and assessing the cumulative impacts of those developments, as well as any “reasonably foreseeable” projects by third parties. HBML’s EIS should not be artificially influenced by hypothetical, but unforeseeable future developments by as yet unknown third parties.	Change incorporated	The quote of Section 6.3 Future Development requests discussion of the Proponent’s developments of the Hope Bay Belt. Section 7.11 Cumulative Effects Assessment requests discussion of the Proponent’s future development plans along with other “other past, present and reasonably foreseeable future actions“. Change of wording to Section 6.3 to add clarity to section.
Section 6.4 Alternatives	KIA (Issue 5) truncated	The scope of the alternatives assessment imposes an unreasonable burden on the Proponent to assess alternatives which are obviously non-viable by inspection. Recommendations: The detailed alternatives assessment requirements outlined in the draft NIRB guidelines should be limited to viable alternatives only. The Proponent should however, list any rejected or non-viable options for the record only. The public or regulators could request that any non-viable option be reconsidered by the Proponent, but only if additional justification was presented that was not already considered by the Proponent.	No change	The onus is upon the Proponent to present the viability of any alternatives being discussed for the Board’s consideration; the Board cannot prematurely rule out any alternatives for the Proponent.
6.5 Economic and Operating Environment	AANDC	The Nunavut General Monitoring Plan (NGMP) constitutes an important component of the Nunavut Land Claims Agreement and operating environment of the proposed project. AANDC recommends that this section include a request for the Proponent to describe their understanding of the NGMP, the roles of various parties in NGMP, as well as potential interactions between the NGMP and the proposed project.	No change	Section 7.7.1 Study Strategy and Methodology-Acquisition Methodology and Documentation included reference to function of NGMP.
6.6 Detailed Project Proposal Description	AANDC	As indicated in our letter to the NIRB regarding the Draft Scope (August 17, 2012) of the Hope Bay Project we feel that it is imperative that the Proponent makes a clear distinction in the Draft Environmental Impact Statement (DEIS) between project activities and infrastructure associated with Phase 1 (Doris North) and those associated with Phase 2 (Hope Bay) at the Doris North and Roberts Bay site. Therefore, we feel this requirement should be reflected in Section 6.6: Project Components and Activities in the EIS Guidelines. It is important that the distinctions between Phase 1 and Phase 2 be made clear so that the potential environmental and socio-economic impacts of the expanded facilities at the Doris North and Roberts Bay sites, that might exceed what was anticipated in the Doris North Project Certificate, be addressed during the assessment of Phase 2.	Change incorporated	Addressed with next comment
	AANDC	Sub-section a) of the Project Component Section in the Revised Draft Scope is a description of the possible project activities and facilities at the Doris North Site. However, there doesn’t seem to be a similar section in the Draft EIS Guidelines. The Guidelines may benefit from a sub-section under 6.0 that describes the project activities and infrastructure that will be used as is, expanded, or newly built at the Doris North site.	Change incorporated	Addressed with previous comment
	KIA (Issue 6)	Section 6.6.1.1, page 20, Geology/Mineralogy of the Ore Deposit. There should be a prior section that provides a description of the regional geology and structure of the Hope Bay Belt, the regional physiographic setting, topography and drainage to set this section into context.	No change	Already in Section 8.1.5 8.1.5 Geological features including discussion of geology and geochemistry

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	KIA (Issue 6)	Section 6.6.1.1, page 20 should also include a summary of the permafrost thickness and thermal regime at each mine site, including groundwater and hydrogeology.	No change	Already in Section 8.1.6 through 8.1.9
	KIA (Issue 6)	Section 6.6.1.2, page 21, 2nd bullet point; add “surface water management” to this list.	No change	Already in Section 6.6.1.5 Natural Drainage Diversion.
	KIA (Issue 6)	Section 6.6.1.2, page 21, 5th bullet point. Proponent should provide a summary of the permafrost conditions at each mine site, which includes thickness of permafrost, thermal regime (depth of seasonal active zone, depth and temperature at level of zero annual amplitude), and geothermal gradient below base of permafrost and whether any effects of climate change were incorporated into the design of the mining facilities. The details of the assessment of climate change effects on the project would be provided in a separate section or appendix in the EIS.	No change	Permafrost already in Section 8.1.4.1 Territorial Environment-Baseline Information. Climate change discussion already in Section 7.10 Impacts of Environment on the Project.
	KIA (Issue 6)	Section 6.6.1.6, last bullet point. Underground mine water sources should also be included.	Change incorporated	
Section 6.6.1.4 Water Supply and Water Treatment Facilities	DFO	1 st Bullet - Identification and description of water supply sources (waterbodies and/or watercourses) and intake sources and facilities, and projections of volumes of water required from each source, <i>including the frequency and timing of withdrawals</i>	Change incorporated	
	DFO	Pg. 23 1 st bullet - Design features to prevent the <i>impingement or entrainment</i> of fish at water intakes <i>[deletion of remaining sentence]</i>	Change incorporated	
Section 6.6.2 Mine Site Tank Farm(s), Roberts Bay Port and Storage Facilities	KIA (Issue 10)	Reference to Traditional Knowledge (TK) and the Precautionary Principle has redundancies. Recommendations: By following NIRB’s general guidelines, the Proponent should be able to provide a summary of the types of TK collected and how it was applied in the design of the various project components and activities. The use of TK and the adoption of the Precautionary Principle should not be used as a benchmark by NIRB for determining if a given component is designed to acceptable standards or not. There may be reasons for ignoring TK or designing to a lower standard than the Precautionary Principle would require, for which the Proponent should provide the associated rationale, risks and contingencies in the EIS.	No change	In some instances, the Board has provided further indications regarding the importance of either PP or TK to the development of certain sections in the EIS.
Section 6.6.4	KIA (Issue 11)	Page 28: Data on seasonal ice cover for proposed shipping routes. Recommendations: Data on seasonal ice cover for proposed shipping routes should be provided in the EIS as part of the baseline for potential impacts on wildlife.	Change incorporated into Section 8.1.13.1	Further detail on ice cover as part of the discussion on physical processes requested in Section 8.1.13.1 Marine Environment – Baseline Information
Section 6.6.10 Exploration	GN	Pg. 31: This section does not consider the proximity of potential exploration to other current land use activity in the region, such as tourism operations or commercial harvesting. Where known economic activity is occurring near proposed ongoing exploration, the GN recommends that the following be added: <ul style="list-style-type: none"> •“Description of any exploration activities occurring near or interacting with other current land users, such as Tourism Operators or harvesters” •“Proposed mitigation to reduce interaction with other current land users, such as Tourism Operators or harvesters” 	Change incorporated	
Section 7 Project Alternatives	EC	EC suggests that a bullet referencing the <i>Guidelines on the Assessment of Alternatives</i> be added to Section 9.4.6 Mine Waste Rock and Tailings Management Plan.	Change incorporated	Reference to Guidelines provided in 9.4.6 Mine Waste Rock and Tailings Management Plan
7.6 Valued Ecosystem and Socio-economic Components	AANDC	Some of the examples of Valued Ecosystem Components (VECs) given in section 7.6 do not seem to meet the definition of a VEC. Noise and Vibration is a result or consequence of anthropogenic activity. Meteorology, geology, hydrogeology and hydrogeology are fields of study not aspects of the environment or resources. Perhaps, examples that more closely meet the definition of a VEC are warranted would better inform the proponent of the requirements of this section.	Changes incorporated	Noise and Vibration remains a VEC as not all sources are anthropogenic. This VEC is meant to represent ambient and naturally produced occurrences from wind moving over the land, waves contacting shore, animal migration or communication, and may be essential to activities such as marine animal navigation.

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	KIA (Issue 12)	Section 7.6.1, page 37: The reporting of terrestrial and marine mammals for Hope Bay. In the list of representative mammals, grizzly bear, polar bears, and brown bears are all listed. It is unclear as to why both brown bear and grizzly bear are listed as VECs. In North America, there are two subspecies of brown bear: the inland grizzly bear and the coastal brown bear. If genetic analyses have shown both coastal brown and grizzly bears are present, perhaps the EIS should state the VEC as the brown bear, which contains both subspecies. Recommendation: The EIS should state the VEC as the brown bear covering both brown and grizzly bears.	Change incorporated	
Section 7.6.1	KIA (Issue 12)	In addition, under “Marine Environment” on this page, marine mammal VECs of importance to hunters (whales, seals) should be included. Mammal VECs that use the sea ice, which could be impacted by ice breaking, should also be included. Current hunting levels should be included if possible such that the interaction of the project with hunting pressure can be evaluated. Recommendation: The EIS should also state marine mammals, such as whales and seals, of importance to hunters as VECs along with other mammals impacted by breaking ice.	Change incorporated under Marine wildlife	Additional details on marine mammals of interest included in existing topic of Marine wildlife already listed. Also see Section 8.1.14 Marine Wildlife discussion.
Section 7.14	KIA (Issue 16)	The determination of significance of environmental effects. This comment is not specific to the EIS Guidelines for Hope Bay, but is more a general criticism of the EA process. The section on Significance Determination requires the proponent to make an assessment of the environment with and without the project and to describe and justify their determination of significance. Recommendation: The EIS Guidelines should include a requirement that, for each VEC, the proponent state the level of change that would, in their opinion, constitute a significant adverse effect. This would set a benchmark for comparison of predicted project effects at the EIS level, or observed project effects after the project is built.	No change	Section 7.14 Significance Determination includes a note that “Assessing the significance of potential impacts is, arguably, the single most important aspect of an environmental impact statement”. It is the Board’s expectation that the Proponent will provide a discussion on its determination of effects significance.
Section 8.1.6.2 Impact Assessment,	DFO	1 st bullet: Discussion of the potential impact of variable and extreme stream-flows on Project design and planning including, <i>how the design and size of proposed watercrossings will ensure adequate flow capacity to accommodate spring freshet and storm flows (e.g. 1 in 100 year or greater storm events). This should also include mitigation contingencies if the watercrossing do not function as intended.</i>	Change incorporated	
Section 8.1.7 Groundwater and Surface Water Quality,	KIA (Issue 7)	Section 8.1.7.1 page 53, Baseline Information, 1st bullet point: NIRB requests the Proponent to “Identify all sources of drinking water (surface and groundwater) as well as water used for recreational purposes, within the area of influence of the project.” This requirement is worded ambiguously, as essentially most surface water bodies could theoretically be used as drinking water and for recreational purposes. Furthermore, the area of influence of the project is not defined. Recommendations: The Proponent should reasonably be expected to determine from the TK process of consultation with the local communities, whether there are any specific surface and groundwater sources that are historically being used for drinking water within the LSA. In addition, the Proponent should identify all surface water bodies likely to be impacted by development. From this data set, the Proponent should identify which of those contain potable water for the purposes of monitoring background conditions to assess if there are any impacts resulting from development. Gathering of detailed baseline information, as required by the NIRB guidelines should then be limited to these water bodies.	Change incorporated	
Section 8.1.7.2 Impact Assessment (Groundwater	DFO	Addition of bullet - <i>Potential impacts on water quality due to under ice water withdrawals;</i>	Change Incorporated	

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and Surface Water Quality)	KIA (Issue 17a)	The impact assessment of surface and ground water. The Guidelines require identification of specific contaminants of potential concern “to the Project”. Recommendations: The guidelines should require documentation of specific CoCs by major project activities. For example: Dioxins and furans for incineration. The document lists “nutrients” for blasting activities but does not distinguish nitrogenous nutrients (which are released by blasting and are a concern for the marine environment) from phosphorus (which is not released by blasting and is a concern for the freshwater environment).	Change regarding COC incorporated into bullet Section 8.1.7.2	Suggested comment on nutrients already addressed in Section 8.1.7.2 Impact Assessment-Groundwater and Surface Water Quality bullet 8 would deal with nutrients released from blasting (i.e. nitrogen based residual materials), whereas bullet 14 would deal with nutrients (i.e. phosphorus based materials) not associated with blasting but released from other project activities such as construction and operations of camps.
	KIA (Issue 17b)	The Guidelines contain a list of contaminant sources that must be considered and makes explicit reference to dust from road traffic and deposition of particulate matter from incineration. Recommendations: Add explicit consideration of dust from ore stockpiles, pits and quarries, loading facilities or waste rock piles as project activities that could potentially contribute contaminants.	Change incorporated	
	KIA (Issue 18)	Wastewater discharge to marine environment. The guidelines do not reflect the project description. Treated wastewater from the TIA will be discharged to Roberts Bay. The Section on the Marine Environment (8.1.13.2, p. 62) does not address discharge of project wastes to the marine environment or an assessment of baseline conditions or project activities in Roberts Bay. The project proposes to make Roberts Bay the location of a port, an accommodation barge and for discharge of treated effluent. The Guidelines do not include a requirement to assess baseline conditions in Roberts Bay or to assess these impacts. Similarly, for Section 8.9 – the focus of the requirement to assess fish and fish habitat is the freshwater environment (8.12.9.2 “sewage and gray water discharge” “discharge”) and Roberts Bay and associated activities are not included. Recommendations: A requirement to assess the “potential impacts on marine water and sediment quality from discharges of Project waste water treatment plants” should be added to Section 8.1.13.2. A requirement to assess the baseline water and sediment quality in Roberts Bay should be added to Section 8.1.13.1 and a requirement to assess the effects of project activities (effluent discharge, accommodation barge, loading docks) on fish and fish habitat of Roberts Bay should also be added. Ensure that Roberts Bay is included in the LSA, not the RSA, as is implied in Section 8.1.13.1	Change incorporated	
Section 8.1.8 Sediment Quality, Section 8.1.8.1 Baseline Information	KIA (Issue 8)	pages 54-55: It is not clear why NIRB would require the Proponent to develop dispersion and flow models for all lakes in the LSA for the EIS. These requirements should only apply to lakes directly impacted by development. Recommendations: Based on the proposed facilities and activities, the Proponent should identify water bodies that are potentially impacted by development under various pathways. For each water body, the Proponent should provide details on what baseline data is appropriate and if flow or dispersion modeling is required to assess impacts, then the baseline program should be designed to collect that information.	Change incorporated	
Section 8.1.9.1 Baseline Information (Freshwater Aquatic Environment)	DFO	pg. 56 1 st bullet: Description and population distribution of fish species in the LSA with a focus on arctic char, lake trout, arctic grayling, <i>and other species identified as contributing to an Aboriginal, recreational or commercial fishery, as well as key forage fish for these species, and including baseline information on the abundance and distribution of these species;</i> [deletion of remaining sentence]	Change incorporated	Actually 3 rd bullet
	DFO	3 rd bullet: Description of existing freshwater habitat in waterbodies and watercourses <i>within the LSA including littoral zones, aquatic and riparian vegetation, lake bottom characteristics, key habitat areas (such as fish overwintering areas, spawning, migration corridors etc.)</i> the estimated productive capacity, etc.;	Change incorporated	Actually 5 th bullet

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Section 8.1.9.2 Impact Assessment-Freshwater Aquatic Environment	DFO	1 st bullet pg. 57: Evaluation of the ability of fish to pass at water crossings along access roads, <i>taking into consideration periods of extreme low and extreme high stream flows;</i>	Change incorporated	Actually Bullet 7 of Section 8.1.9.2
Section 8.1.10.2	KIA (Issue 19)	Vegetation monitoring and mitigation and the lack of for other Impact Assessments. Vegetation is the only VEC for which there is a requirement that the Impact Assessment include monitoring and mitigation i.e. p. 58 states the following “ <i>Discussion of proposed vegetation monitoring specifically contaminant levels in species directly consumed by wildlife (e.g. lichen and/or humans (e.g. Labrador tea, blueberries) and/or indirectly consumed through food consumption (i.e., caribou); Discussion of the management measures for minimizing/mitigation of disturbances to plant associations, including progressive reclamation/re-vegetation plans for disturbed areas, and measures to reduce the potential for establishment of invasive species in the area;</i> ”. These requirements are not made for water and sediment, fish and fish habitat, wildlife, birds or marine mammals and marine ecosystem impact assessments. Monitoring and Mitigation are addressed in the context of Environmental Management (AEMP) and Wildlife Monitoring in Section 9. Recommendations: A requirement for Impact Assessments for water and sediment, fish and fish habitat, wildlife, birds; marine mammals, and marine ecosystems to include monitoring and mitigation should be added to Section 8. Conversely, if these requirements are covered elsewhere, then delete the need for monitoring and mitigation discussion from the vegetation section (8.1 10.2) and move it to Section 9.	Some change incorporated	Each of the VEC’s in Section 8 already includes an extensive subsection outlining the Impact Assessment for each item, therefore from the quoted text, the request was interpreted to be a request for more discussion on proposed mitigation and monitoring methods. As the comment notes, Section 9 of the Guidelines already requests discussion of these items. Changes that were incorporated did not include redundant content of Section 9, but focused on including a discussion on the general monitoring and mitigation for the various impact assessments for various VEC’s in Section 8 which can lead into the Section 9 content. Changes included Section 8.1.9.2 Freshwater Aquatic Environment-Impact Assessment bullets 9 and 10, Section 8.1.11.2 Terrestrial Wildlife and Wildlife Habitat-Impact Assessment bullet 9, and Section 8.1.12 Birds and Bird Habitat-Impact Assessment bullet 17. As it is not common that a Proponent submit a stand-alone vegetation plan, this discussion is the basis for further discussion of several other topics (i.e. dust management, Transportation/Roads Plan, Wildlife Plan, and Waste Management Plan) and therefore this item remains in Section 8.
Section 8.1.11.2	KIA (Issue 13)	Page 59: The tracking of changes in wildlife populations. The Terrestrial wildlife section of the EIS states that potential effects on population size, abundance, distribution, and behavior of wildlife VECs will be evaluated due to a variety of potential project effects. However, only two main measureable outcomes, in reality, result in changes to wildlife populations – an increase in mortality (or decrease in survival), and a decrease in reproductive success. Recommendations: The EIS should have the proponent evaluate project effects on wildlife by monitoring the two main outcomes of mortality/survival and reproduction.	No change	It is the Proponent’s responsibility to choose indicators such as behaviour and mortality; however the NIRB would be cautions to endorse an assessment limited to mortality and reproductive success.
	KIA (Issue 14)	Sections 8.1.11.2 (page 59-60), Section 8.1.12, and Section 8.1.14.2: Suggest that the impact of all of these potential stressors or impacts on each VEC need to be evaluated together as well. Recommendations: The EIS should have the proponent assess the combined and accumulated effects on each VEC for terrestrial, marine, and avian wildlife.	No Change	Already in Section 7.11 Cumulative Effects Assessment especially bullets in 3 rd paragraph including discussion on Phase 2 cumulative impacts as well as all projects within the area past, present, and reasonably foreseeable future.
Section 8.1.12.2	KIA (Issue 15)	The measurement of environmental impact on avian wildlife: This section, unlike the terrestrial wildlife section, provides little information about the metrics used to evaluate potential impacts on birds. Measures such as population abundance, reproductive success, mortality rates, density, diversity, etc., could all be measured. There may be a need to be more explicit in this section such that the most sensitive metrics for determining impacts on bird species are selected. Recommendations: The EIS should have the proponent develop appropriate, specific measurements for impact on avian wildlife.	Change incorporated	8.1.12.1 bullet 3 added listed items to previous bullet of ”Description of the relative seasonal/annual abundances, distributions and trends in range or habitat use, movements and population status of bird VECs”.
Section 8.1.13.2 Impact Assessment-Marine	DFO	Addition of - <i>Potential impacts of wake effects from shipping on the shoreline stability and sensitive fish or marine mammal habitat i.e. coastal wetlands.</i>	Change incorporated	

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Environment	DFO	Addition of - <i>Potential impacts of sedimentation from propeller wash on water quality, fish and fish habitat and, benthic invertebrates.</i>	Change incorporated	
	DFO	Addition of - <i>Potential impacts of ballast water discharge on water quality, fish and fish habitat, benthic invertebrates including cumulative impacts over the life of the project.</i>	Change incorporated	
Section 8.1.14.2 Impact Assessment-Marine Wildlife	DFO	4 th bullet: Risk assessment of the potential introduction of <i>non-native aquatic species due to ballast water discharge, ship wash and hull fouling.</i>	Change incorporated	
Section 8.2.1.1 Economic Development and Opportunities	GN	pg. 65: The first bullet requests information on traditional economic activity, and the current economic structure in the Project RSA. The GN suggests that this also implies a comparison between wage and traditional economic activity in the region, which is valuable to the GN in assessing the potential impact of the Project on the local/regional economy. For clarity, the GN recommends that the first bullet point be revised slightly as follows: “The traditional economy, current economic structure including the interaction between the wage and traditional economy, development trends...”	Change incorporated	
Section 8.2.6.1 Traditional Activity and Knowledge	GN	pg. 68: The third bullet point asks for information relating to country food consumption but does not request specific information about hunters’ existing harvesting activities. The GN recommends adding the following bullet point: “Descriptions, including maps, of traditional and current hunting ranges and patterns in the LSA” Knowledge about current harvesting activities is essential for assessing project impacts on the accessibility of country food. Accessibility of country food is an important factor for food security, as well as socioeconomic factors such as time and fuel expenditure on hunting and increased potential for emergencies occurring on the land.	Change incorporated	
Section 8.2.6.2 Impact Assessment Traditional Activity and Knowledge	DFO	pg. 69, 7 th bullet: Potential impacts to <i>Aboriginal fisheries species, including fish of cultural importance to northerners</i>	Change incorporated	
	GN	pg. 68-69: The first bullet in this section is not clear enough in relation to specific potential impacts of the project on wildlife herds (reduction of herd size, changes in migration patterns and reduction of habitat) or the ability of communities to harvest country food. In order to assess the precise interactions of project activities and wildlife herds, and specifically how these interactions will affect country food accessibility, the GN recommends revising this point as follows: “Potential effects of the Project on the ability of hunters to access or harvest caribou and other wildlife species, owing to a reduction in habitat, herd size or other changes to migration patterns, including potential risks to present and future generations of harvesters.	Change incorporated	
Section 8.2.7.2 Impact Assessment-Non-traditional Land Use and Resource Use	DFO	Addition of bullet - <i>Potential impacts to the ongoing productivity of local or regional commercial, recreational or Aboriginal fisheries</i>	Change incorporated	
Section 8.2.9.2 Health and Wellbeing	GN	pg. 71: The GN notes that the Health and Wellbeing section does identify substance abuse as an area for assessment; however, pinpointing the precise issue of ‘increased access’ is valuable to the GN in assessing the proponent’s preparedness on this issue. Therefore, the GN recommends including the following item to the bulleted list under Impact Assessment: “Potential for increased access to alcohol and other controlled substances resulting from increased disposable incomes including movement of these substances through the Project site”	Change incorporated	

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Section 8.2.10.2 and 8.2.10.3 Community Infrastructure and Public Services	GN	pg. 72-73: Under Topics for Discussion, the fourth bullet point reads: “Potential impact on availability and adequacy of existing health infrastructure and services including medical, dental, vision, social, mental (including addictions); environmental health officers, social workers, registered nurses, medical director; access to medical travel and interventions” This bullet point is in fact asking about “impacts” and is closely related to bullet point three (concerning increased demand for health services) in Section 8.2.10.2 (Impact Assessment). Both of these points refer to demand for, and capacity of, services provided by HSS and it is important that they are both listed under “impacts” and considered in combination. Therefore, the GN recommends that the fourth bullet point be moved into the “Impact Assessment” section, and placed directly under bullet point three.	No change	This bullet was included in Topics for Discussion as it relates to the impact noted in the previous section, but as noted in Section 8.2 that the Proponent is requested to provide discussion on items essential to capturing the overall socio-economic analysis, but are beyond the effect of the Proponent; such as a lack of ability to effect the staffing levels and availability of healthcare professionals as well as wellness and social services.
Section 8.2.11.2 Health and Safety	GN	pg. 73 Bullet seven asks for “Potential impacts of workplace discipline and cultural conflicts among Nunavummiut and Southern workers” Prior experience shows that conflicts can arise over the use of Inuktitut or Inuinnaqtun by Inuit at mine-sites and that these conflicts can result in negative experiences for Inuit workers. GN-HSS believes it is therefore important to ensure the proponent will address this specific issue in its EIS. Therefore, the GN recommends modifying this point as follows: “Potential impacts of workplace discipline and cultural conflicts among Nunavummiut and Southern workers, including those issues which may be related to or exacerbated by language barriers between employees.”	Change incorporated	
Section 8.3 Human health and Environmental Risk Assessment	GN	pg. 74: Section 8.3 reads: “Key components of the Human Health Risk Assessment process include the identification of potential Project-human interactions (pathways), and hazardous substance constituents of potential concern (COPC), human receptors and assessment criteria. As such, the Human Health Risk Assessment is to include”. The GN-HSS proposes changing this as follows: “Key components of the Human Health Risk Assessment process include the identification of potential Project-human interaction pathways, hazardous substance constituents of potential concern (COPC), human receptors and assessment criteria. As such, the Human Health Risk Assessment is to include” This small change adds clarity to the expectations.	Change incorporated	
	GN	In addition, the third bullet point reads: “Identification of pathways to human receptors.” The GN recommends changing this point as follows: “Identification of all pathways to human receptors including bioaccumulation in country foods.” Nunavummiut eat significant quantities of country food. Although consumption of country food is just one pathway, contaminant levels in country food caused by a project may be difficult to predict and are a key issue of public interest. The proponent should therefore be required to specifically address this issue in its discussion of Environmental Risk. GN-HSS is concerned that without a clear and direct discussion of this pathway, effective assessment of its impact on human health will not be possible.	Change incorporated	
	KIA (Issue 9)	The KIA is not mentioned in this section as playing a key role in the HHERA assessment or in the development of the various Plans included in the EMS. Recommendations: NIRB should direct the Proponent to include the KIA’s advice in developing the requirements of these guidelines and to ensure that the selected COPC’s and VEC’s developed in the HHERA, as well as remediation criteria to be used for reclamation are reflective of KIA values and traditional land use.	Recommendation given	The NIRB suggests that the Proponent consult with the KIA and other parties in the selection of VECs and COPCs, as well as in the development of its various plans as required for the Project.

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Section 9.0 Environmental Management System (EMS)	KIA (Issue 20)	Legacy issues for Environmental Management Plans: Section 9 details requirements for Environmental Management Plans such as those for waste rock (9.4.6) and ore storage (9.4.5). These are sound and good but would benefit from explicit reference to waste rock and ore that is currently exposed and unmanaged at the existing facilities. On KIA's June 2012 site visit we saw that much of the Boston site is built on a rock pad that is made up of ore and waste rock and that runoff from this is not managed. We also saw large areas of core storage at the Boston and Windy sites from which drainage was not controlled. How does the EA process address these ongoing contaminant threats? Recommendations: The guidelines should contain explicit reference to containment and control of legacy contaminant sources in the Environmental Management Plans.	Change incorporated	
9.4 Biophysical Environmental Plans	AANDC	After a review of the Biophysical Environmental Plans listed AANDC suggests that a "Cyanide Management Plan" which would include a description of proper disposal, handling, management and any impacts that may occur to ground water in relation to cyanide. Please note the International Cyanide Management Code http://www.cyanidecode.org/ .	Recommendation provided	The NIRB expects that the Proponent will give due consideration to cyanide management within its Environmental Management System and relevant plans (including but not limited to its Hazardous Materials Management Plan and Mine Waste Rock and Tailings Management Plan) as well as providing an indication of its intention to become a signatory to the International Cyanide Management Code.
	KIA (Issue 21)	Lack of an Asset Management Plan for camp infrastructure and buildings: There is no requirement in the section 9.4 of the draft EIS guidelines for an Asset Management Plan concerning the structural integrity of camp infrastructure and buildings. Criteria or thresholds should be established for the maintenance of camp infrastructure and buildings that would have to be met or trigger the removal of infrastructure and buildings prior to excessive deterioration occurring for camp assets. Recommendation: The guidelines should include in section 9.4 a requirement for an Asset Management Plan for camp infrastructure and buildings with appropriate criteria for infrastructure and building maintenance and triggers for their removal from site.	No change	Removal of infrastructure and buildings is considered with closure and reclamation activities; the Proponent is required per Section 9.6 to provide plans to address the closure, reclamation, care and maintenance of site and site assets.
Section 9.4.10	KIA (Issue 22)	Roads Management Plan: The guidelines for the roads management plan contains the following statement " <i>Mitigation measures and protocols to be implemented during construction and operations to mitigate potential impacts to wildlife, including collisions and follow-up procedures.</i> " This is a useful requirement that could go further. Recommendations: The Guidelines should contain a requirement for the operator to set explicit thresholds for mitigation of potential wildlife interaction with roads and airstrips.	Change incorporated	
Section 9.4.11- Shipping Management Plan	DFO	Addition of bullet - <i>Discussion on the challenges of cleaning up a fuel spill in the Arctic environment due to cold temperatures, presence of ice, darkness and remoteness.</i>	Change incorporated	
Section 9.4.13	KIA (Issue 23)	Explosives Management Plan: Bullets 3-2 and 3-3 on p. 86 appear to be misplaced as they request the proponent to describe and mitigate interactions of the explosives manufacturing and storage facilities (which are on land facilities) with marine mammals as part of the explosives management plan. Recommendations: Reconcile this misplaced material.	Change incorporated	
Section 9.4.16	KIA (Issue 24a)	Aquatic Effects Monitoring Plan: The focus and intent of the AEMP appears to be misplaced. Bullets 2, 3 and 4 refer to a requirement that the AEMP address erosion and sediment control measures, measures to protect fish from blasting and a description of the fish out program. These requirements refer to operational protocols and management plans for specific activities and are not AEMP procedures. Although they are important they are not part of the AEMP and should be moved elsewhere in the document. Recommendations: Move requirements for plans and descriptions of erosion and sediment control measures, measures to protect fish from blasting and a description of the fish out program to the section on Environmental Management Plans.	Change incorporated	Introduction paragraph of section reworded to more accurately describe why the NIRB is requesting the outlined information within this plan, and in the suggested bullets, it is noted that the activities are discussed in the context of their occurrence in or near aquatic systems, fresh or marine..

Section	Commenter	Comment	Action	Rationale
	KIA (Issue 24b)	Harmonization of reporting protocols: The guidelines state that the AEMP must contain monitoring and reporting protocols as per the EEM requirements of the MMER. Recommendations: NIRB and other Parties should develop one comprehensive AEMP that meets the requirements of NIRB and the MMER-EEM program.	No change	If the project should proceed through the Review stage on to development, the NIRB will develop a Monitoring Program pursuant to Section 12.7.1 of the NLCA and will work to develop harmonious monitoring and reporting requirements.
	KIA (Issue 24c)	Complexity of AEMP designs: AEMP designs are generally complex and, as such, an AEMP Design document should be submitted for review by the KIA and other Parties and for formal approval by NWB. Recommendation: The Guidelines should require that an AEMP design document be submitted to the NWB for review by the KIA and other Parties and approval by NWB as part of the Water Licensing process.	No change	The NWB licensing process will make considerations for the AEMP and any other plans required in consideration of a future licence application. Requirements of the NWB are outside the current scope of the NIRB’s EA.
	KIA (Issue 24d)	Stated impacts for AEMP: The last bullet speaks to the need for the AEMP to detect effects on fish and fish habitat. The AEMP must also address water quality, sediment quality, invertebrates and primary producers. Recommendations: Change the wording in the last bullet to “...project related impacts on the aquatic ecosystem” instead of “...project related impacts on fish and fish habitat”	Change incorporated	
	KIA (Issue 24e)	Exclusion of marine environment from AEMP: The Guidelines contain no specific requirement for an AEMP for the marine environment (“aquatic environment” is generally interpreted as freshwater). Robert’s Bay will be the site for discharge of all project effluent, a dock and an accommodation barge and yet the Guidelines do not contain any requirement for monitoring the marine environment. Recommendations: Add a specific requirement that the AEMP include the marine environment of Roberts Bay.	Change incorporated	
Section 9.4.18 No Net Loss Plan	DFO	To note, it is DFO’s understanding that the alternatives currently being considered for tailings management do not include waterbodies frequented by fish. In addition, in order to avoid confusion regarding the term “compensation”, DFO recommends the No Net Loss plan be defined as: measures to “off set” the loss of fish habitat.	Change incorporated	
	DFO	1 st bullet: The Proponent shall present a No Net Loss Plan (NNLP) to discuss measures to be implemented <i>to offset</i> the loss of aquatic habitat due to Project activities and components.	Change incorporated	
	DFO	1 st bullet: Deletion of “and compensation”;	Change incorporated	
	DFO	Pg. 90, 2 nd bullet: <i>Plans to offset losses to fish habitat in order achieve</i> “No Net Loss” of fish habitat productive capacity [<i>deletion of remaining sentence</i>];	Change incorporated	
	DFO	Pg. 90, 6 th bullet: Details regarding the proposed <i>offsetting</i> options	Change incorporated	
	DFO	The removal of bullets 8 and 9 of pg. 90;	Change incorporated	
	DFO	The removal of the second to last bullet which reads: “Estimates the costs associated with the implementation of each element of the plan”; and,	Change incorporated	
	DFO	Revision of the final bullet of this section to read: “Description of the consultations <i>undertaken on</i> the No Net Loss Plan, <i>with</i> the KIA, DFO and other affected parties, <i>including overall effort and opportunities for parties to provide options for offsetting predicted impacts to fish and fish habitat</i> ”.	Change incorporated	

Section	Commenter	Comment	Action	Rationale
9.5 Socio-Economic Environmental Plans	AANDC	Section 9.5 outlines the requirement that the Proponent present their socio-economic monitoring plans within their Environmental Impact Statement. In paragraph three of this section the guidelines indicate general areas of monitoring to be human resources, occupational health and safety, public involvement, implementation of the IIBA and if applicable, development partnership agreements. However in paragraph one of Section 9.5 the guidelines indicate that monitoring techniques and indicators be developed for all socio-economic impacts described in Section 8.2 of the guidelines. It is unclear which socio-economic aspects of the assessment the Proponent is expected to present socioeconomic monitoring plans and indicators for. Expectations in this regard should be clarified.	Change incorporated	
	GN	pg. 90-91: The GN encourages discussion and collaboration early with the Kitikmeot SEMC and with relevant monitoring partners on project-specific socio-economic monitoring. In this way, any project-specific program should aim to be consistent with the broader regional priorities through the Kt-SEMC. The GN notes that we are working with Newmont on project-specific monitoring for the Doris North project, and look forward to continuing our relationship with respect to the Hope Bay Belt development.	No change	The Guidelines as written suggest that the Proponent align its socio-economic monitoring programs with the initiatives of the Regional SEMC.
Comments on the Revised <i>Draft EIS Guidelines Document Submitted Regarding Draft EIS Guidelines – November 30, 2012</i>				
Section 8.1.11.2	KIA (Issue 13 reiterated)	Tracking of changes in wildlife populations: KIA reiterated its suggestion that the Proponent be directed to discuss impacts to wildlife populations in terms of mortality and reproductive success.	No change	Additional information: The Proponent may discuss these variables and statistics as part of its impacts analysis, but limiting the Proponent to discussing any impacts in the context of only these two variables would not produce a thorough assessment. Limiting the Proponent’s statistical analysis increases the risk that some variables not directly measurable through birth and death rate (i.e. bioaccumulation without mortality, changes to animal movement and hunter impacts, and potential disturbance to genetic mixing from herd separation or animal segregation) may not be statistically represented and therefore not considered in the significance determination.
	KIA (Issue 14 reiterated)	<p>KIA direction re assessment of combined and accumulate effects: “The request was for the inclusion of an evaluation of the overall effect of the Hope Bay Mine (on its own, with all effects considered together), for each wildlife VEC.”</p> <p>By sub-dividing effects per VEC during the effects assessment and not looking at the overall effect of the Hope Bay project on each VEC through an interaction of those effects, there is less chance that residual effects would be predicted and moved forward into the CEA. Therefore, an evaluation of the overall effect of the Hope Bay project (prior to the CEA, and for Hope Bay only) should be done for each wildlife VEC, considering the integrated response of wildlife VECs to all of the effects. Evaluating the overall impact of effects on each wildlife VEC within the CEA is also important, but it addresses a different question completely.</p>	No change	<p>The issue was attempted to be clarified through changes to wording in Section 6.3 in the previous set of revisions. Section 6.3 requests consideration of impacts from “foreseeable future developments scenarios as such may pertain to the Hope Bay Belt have been taken into consideration when designing the infrastructure and ancillary utilities for the Phase 2 Project.”</p> <p>The Proponent has been provided with the general framework of the question, and it is up to them to provide the analysis, justifications, and results. If the analysis is not adequate in the Draft EIS, then it is up to the KIA to make the argument when reviewing the content of the EIS and providing its feedback.</p>
Section 9.4.18	DFO	DFO has one further suggested edit to the guidelines document: to revise bullets 5 and 6 of section 9.4.18 No Net Loss Plan to read as follows: <i>Details regarding the proposed offsetting options, including locations and conceptual designs for implementation (e.g., rearing habitat, migration channels, etc.);</i>	Change incorporated	

Section	Commenter	Comment	Action	Rationale
Section 9.4.6	NRCan	<p>While NRCan has no specific comments on the EIS Guideline sections that cover acid rock drainage, metal leaching and mine waste management, we suggest that the following documents be referenced in the EIS guidelines as documents the proponent should consult for the development of the acid rock drainage/metal leaching mine waste characterization and management plan.</p> <ul style="list-style-type: none"> • Price, W.A. (2009) Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials (MEND Report 1.20.1), and • O’Kane Consultants. (2012) Cold Regions Cover System Design Technical Guidance Document (MEND Report 1.61.5c). 	Change incorporated	Suggested material incorporated into Section 9.4.6 and References.
Section 6.1 Project Design	NRCan	<p>Bullet 2 – It is suggested that additional detail be included to ensure that adequate information is provided in the EIS regarding how climate change and variability have been considered in project design including mitigation of impacts.</p> <p><i>“A discussion on how the potential of climate change based on current knowledge and its effects on the physical environment (e.g. hydrological regime, permafrost, coastal processes) has influenced the design, planning and management of the Project components and activities. Identification of Project sensitivity to changes in specific climate-related parameters should also be included.”</i></p>	Change incorporated	
Section 6.6.1.1 Geology/mineralogy of the ore deposits	NRCan	<p>Bullet 4 – It is suggested that the requirement be more inclusive with respect to characterization of the overburden as other properties of surficial materials are also important for determining potential stability issues associated with the open pit: <i>“A description of the overburden including texture/grain size, moisture/ice content and occurrence of ice lenses and implications for the Project.”</i></p>	Change incorporated	
Section 6.6.1.5 Natural Drainage Diversion	NRCan	<p>It is suggested that a requirement be added with respect to details on the design of any structures required for water diversion (e.g. berms, dykes etc.). This information is required to ensure that a complete picture is provided with respect to plans for drainage diversions and potential impacts.</p>	No change	As these details are required at the licensing stage, the NIRB is no longer requiring these details at this time as this is no longer a NIRB/NWB coordinated process. The impacts of the diversion structures would be very minor compared to the impacts of the water diversion activity itself, which would be the primary interest of the EA process as this stage.
Section 6.6.2 Mine Site Tank Farm(s), Roberts Bay Port and Storage Facilities	NRCan	<p>Bullet 1- Add the following text (indicated in bold): <i>“Discussion of how the precautionary approach has been incorporated into the design of storage facilities and the proposed expansion/utilization of the existing Roberts Bay Port, to account for the challenges of the Project area including considerations for extreme temperatures, variations in ice thickness, seismic hazards, and water level change, nearshore sediment mobility and alongshore drift in the layout and structure of various facilities and design features (where applicable);”</i></p>	Change incorporated	
Section 6.6.2 Mine Site Tank Farm(s), Roberts Bay Port and Storage Facilities	NRCan	<p>Bullet 2- Add the following text (indicated in bold) <i>“Discussion of the study results related to bathymetry, rock and sediment geotechnical properties, sediment thickness and sub-sea permafrost depth and thickness and quality for the proposed dock site (if required);”</i></p>	Change incorporated	

Section	Commenter	Comment	Action	Rationale
Section 6.6.3.1 Waste Rock Facilities	NRCan	It is suggested that the 2nd bullet be revised to include a description of how general climatic conditions and climate trends have been considered in design of facilities (similar to 6.6.3.2 tailings management facilities, 3rd bullet).	Change incorporated - clarification provided in bullet.	
Section 6.6.4 Ground Transportation and Associated Water Crossings	NRCan	It is suggested that the 1st bullet also include information on proposed sources for construction materials in order to ensure that adequate information will be provided on aggregate requirements and need for access roads.	Change incorporated	Clarification provided in bullet.
Section 6.6.5 Marine Shipping	NRCan	Bullet 1- Add the following text indicated in bold): <i>“Description of the proposed marine shipping vessels (types, sizes, draft and numbers of vessels to be used, and the vessel’s intended purpose) including the accommodations barge, associated frequency and timeframe for the shipping season for all project activities during each phase of the Project. Include a discussion on the existing marine traffic volumes along the proposed shipping routes to describe the marine traffic network of the region;”</i>	Change incorporated	
Section 7.6.1 Valued Ecosystem Components	NRCan	A revision is suggested for the 5th Bullet (Geological features) to ensure that a description of surficial and bedrock geology is included: <i>“.....discussion of surficial and bedrock geology and geochemistry.”</i>	Change incorporated	Changes required to Section 7.6.1 title of VEC, change translated to specific section on VEC of 8.1.5.
Section 7.6.1 Valued Ecosystem Components	NRCan	It is suggested that bullet 13, Marine Environment, also include the coastal environment/zone to ensure that information is provided on baseline conditions and impacts associated with the interface between marine and terrestrial environments (including issues of coastal erosion for example).	Change incorporated	Additional wording to clarify in Section 8.1.13.1 bullet 1, already present in bullet 5 of section; impacts to shoreline stability requested on this already in Section 8.1.13.2 bullet 5.
Section 7.10 Impacts of the Environment on the Project	NRCan	Paragraph 1- Add the following text (indicated in bold): <i>“The Proponent shall discuss the potential impacts of the environment on the Project, considering such factors as geotechnical hazards (including slope and underground instability, differential or thaw settlement, frost heave, ice scour, coastal erosion and seismic activity), unfavourable geological conditions (weak zones and/or faults), permafrost (ground instability related to permafrost thaw and artesian groundwater pressure due to permafrost confinement), hydrological conditions (low precipitation years, low flow conditions in rivers etc.), severe weather events (extreme precipitation events, flooding, storm surges etc.), sea ice conditions, ice ride-up and pile-up, sea level trends, vertical motion of land and global climate change.”</i>	Change incorporated	
Section 8.1.4.1 Baseline information (Terrestrial Environment)	NRCan	Bullet 3 - Add the following text (indicated in bold): <i>“Discussion of the landforms and topographic features at areas proposed for construction of major project components, including the type, thickness, soil stability, and sensitivity and classification and distribution of soils as applicable;”</i>	Change incorporated	Wording added as “...thickness, soil stability and/or clay sensitivity , and classification and distribution...” sensitivity which refers to clay content type and remodelling stability is related to overall soil stability.
Section 8.1.4.1 Baseline information (Terrestrial Environment)	NRCan	Bullet 4 – It is suggested that this requirement include reference to both bedrock and surficial geology to ensure that an adequate description of surficial materials is provided and terrain sensitivity/stability is adequately considered in project design and impact assessment. It is also suggested that this information be required at areas of proposed project component sites. Suggested revision: <i>“Description of the bedrock lithology, morphology, surficial geology, landform and soils (including sediments and the thermal and ground ice conditions) at proposed borrow and quarry sites, and other areas where earthworks are proposed, including proposed project facilities such as tailing and waste rock management facilities, roads etc. If eskers are identified as a potential source of granular material then a description of granular material properties, including thermal condition and ice content, should also be described.”</i>	Change incorporated	

Section	Commenter	Comment	Action	Rationale
Section 8.1.4.1 Baseline information (Terrestrial Environment)	NRCan	Bullet 4 – Bullet 6 – It is suggested that this be modified to include a description of permafrost and talik configuration in the development area in order to ensure that relevant subsurface hydrologic connections between water bodies and with underground and open pit mines and mine waste management facilities: <i>“Discussion of the relationship between permafrost processes and active layer, surface waterbodies and topography, including a description of permafrost and talik configuration in the development area and adjacent water bodies and implications for groundwater flow pathways.”</i>	Change incorporated	Added to bullet 4, but left bullet 5 and 6 as they request other information on slope stability and suitability for re-vegetation that would be lost if they were modified instead of just adding.
Section 8.1.4.2 Impact Assessment (Terrestrial Environment)	NRCan	Bullet 3 – For clarification and to ensure that adequate information is provided, it is suggested that examples of project components be provided: <i>“Potential for soil erosion, including stream bank erosion, resulting from surface disturbances associated with the Project components or facilities (e.g. road embankments, water crossings, water management/diversion) during all Project phases.”</i>	Change incorporated.	
Section 8.1.4.2 Impact Assessment (Terrestrial Environment)	NRCan	Bullet 5 – This requirement appears to have an error and design of project components should be included rather than design of baseline information. For increased clarity, explicit reference to terrain stability is also suggested. <i>“Implications to the Project planning and design of project components related to terrain conditions and stability, in particular permafrost, sensitive landforms, high ice-content soils, ice lenses, thaw-sensitive slopes, and talik zones.”</i>	Change incorporated.	
Section 8.1.5.1 Baseline Information (Geological features including discussion of geology and geochemistry)	NRCan	Bullet 1 – To ensure that maps provide information that is useful for assessing effects at the scale of the project, it is recommended that the word “maps” be qualified with <i>“of the appropriate scale”</i> .	No change	Requirement already spelled out in Section 4.5 – Data Presentation as an all-encompassing instruction for all maps and figures provided in the EIS.
Section 8.1.5.1 Baseline Information (Geological features including discussion of geology and geochemistry)	NRCan	In order to characterize the lithology of the subsurface materials, it is recommended that additional information be presented. It is suggested that an additional bullet be included. <i>“Description of lithology, including thickness, spatial distribution, age, colour, grain size, porosity, permeability, mineralogy, physical strength, hardness and weathering characteristics.”</i>	No change	Already covered in Bullet 1 which requests discussion on the “physical, chemical and hydrogeological properties” of the regional bedrock and quaternary geology.
Section 8.1.7.1 Baseline Information (Groundwater and Surface Water Quality)	NRCan	In order to better characterize the groundwater flow system, including groundwater interaction with project components, surface water, and permafrost, and to assist in assessing impacts to groundwater and surface water, it is recommended the following additional bullets be included: <ul style="list-style-type: none"> <i>“Provide maps and cross sections of the study area indicating the extent of hydrostratigraphic units, permafrost, and lake taliks. Groundwater levels, potentiometric contours and groundwater flow directions should be included.”</i> <i>“Provide the location and description of all on-site groundwater monitoring wells, including well diameter and screen depth and intercepted aquifer unit. Include all baseline groundwater level data.”</i> <i>“Provide hydraulic conductivity data for hydrogeologic units in the study area.”</i> <i>“Provide a detailed groundwater budget”</i> <i>“Include a discussion of groundwater interactions with lakes in the area.”</i> 	Change incorporated.	

Section	Commenter	Comment	Action	Rationale
Section 8.1.7.2 Impact Assessment (Groundwater and Surface Water Quality)	NRCan	Bullet 6 - Add a few words in order to be inclusive of impacts related to groundwater infiltration into underground mine workings.	Change incorporated.	
Section 8.1.13.1 Baseline Information (Marine Environment)	NRCan	Bullet 2 - Add the following text (indicated in bold): “Data on seasonal ice cover including timing of ice freeze-up and break-up for the proposed shipping routes;”	Change incorporated.	
Section 8.1.13.2 Impact Assessment (Marine Environment)	NRCan	It is recommended that the following bullet be added. “Potential impacts on sedimentation patterns and subsequent impacts on subsea permafrost in the nearshore region.”	Change incorporated.	