

Appendix V1-1

Table of Concordance

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
2.0 GUIDING PRINCIPLES	2.1 NIRB'S IMPACT REVIEW PRINCIPLES		An ecosystem-based approach must be adopted for the review - In order to gain an adequate understanding of the effects of the Project, an ecosystem-based approach must be adopted to ensure that the review addresses both the direct impacts that the Project will have on the various ecosystem components, as well as the interactions that will occur between components.	4, 5, 6, 7, 8	All	-	-	All
2.0 GUIDING PRINCIPLES	2.1 NIRB'S IMPACT REVIEW PRINCIPLES		Socio-economic issues, such as giving consideration to the potential for the Project to affect economic development within the region, must be included in the review - Members of the community constitute a critical part of the environment, and their concerns relating to the Project need to be assessed by the NIRB. As such, adverse and beneficial effects of the Project on members of the community with respect to health, recreation, and other aspects of social well-being need to be addressed in the EIS, in order to ensure a culturally holistic understanding of the Project's effects.	8	All	-	-	All
2.0 GUIDING PRINCIPLES	2.1 NIRB'S IMPACT REVIEW PRINCIPLES		An understanding of past and potential future environmental, economic, and social trends in the region potentially affected by the proposed Project, and how the Project will influence these trends is required - The inclusion of a time perspective on all phases of the Project, from the early planning stages through operations and closure including post-closure and maintenance phases where appropriate. It is important to include all phases of the Project in order to provide the NIRB with a full understanding of the cumulative environmental effects in combination with other past, present and reasonably foreseeable projects.	4, 5, 6, 7, 8, 9	All	-	-	All
2.0 GUIDING PRINCIPLES	2.1 NIRB'S IMPACT REVIEW PRINCIPLES		The well-being of residents of Canada outside the Nunavut Settlement Area must be taken into account - Significant transboundary biophysical and socio-economic effects directly related to this Project must be included in the EIS in order to ensure the NIRB's assessment of the well-being of Canadians outside of the NSA.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.7 X.7 X.7 X.7 X.7 1.4	-	1-29, 2-35 4-68, 5-147, 6-76, 7-61, 8-88, 9-56, 10-50 1-52, 4-58, 5-41, 6-67, 7-46 2-40, 3-31, 4-43, 5-27, 6-44, 7-36 1-31, 3-106, 4-73, 5-43 1-47
2.0 GUIDING PRINCIPLES	2.2 PUBLIC PARTICIPATION AND ENGAGEMENT		In preparing its EIS, the Proponent is required to engage potentially affected communities, its residents, Inuit Organizations, Aboriginal groups, and other governments or other organizations, including where relevant, adjacent jurisdictions outside of the Nunavut Settlement Area. Refer to the NIRB's Guide 6B: A Proponent's Guide to Conducting Business Consultation for the NIRB Environmental Assessment Process when preparing to consult with the general public. Public participation is required when: - Identifying current and historical patterns of land and resource use, - Acquiring traditional knowledge (TK), - Identifying VECs and VSECs, - Evaluating the significance of potential impacts, - Deciding upon mitigating measures, and - Identifying and implementing monitoring measures, including post-project audits.	3	1, 2, 3	1.3, 1.4, 1.5, 1.6, Table 1.6-1, 1.7, Appendices V3-1A, V3-1B, V3-1C, V3-1E, V3-1G, 2.1, 2.2, 2.3, 2.4, Appendix V3-2A, 3.2, 3.3, Appendix V3-3A	-	1-5 to 1-44, Appendices V3-1AA, V3-1B, V3-1C, V3-1E, V3-1G 2-1 to 2-6, Appendix V3-2A 3-34 to 3-40, Appendix V3-3A
2.0 GUIDING PRINCIPLES	2.2 PUBLIC PARTICIPATION AND ENGAGEMENT		Another objective of the NIRB review process is to involve potentially affected Nunavummiut to address concerns regarding any changes that the Project may cause in the environment and the resulting effects of any such changes on the traditional and contemporary use of land/ice and resources. The Proponent must ensure that Nunavummiut have the information that they require in respect to the Project and on how the Project may impact them.	3	1, 3	1.3, 1.4, 1.5, 1.6, Table 1.6-1, 1.7, Appendices V3-1A, V3-1B, V3-1C, V3-1E, V3-1G 3.2, 3.3, Appendix V3-3A	-	1-5 to 1-44, Appendices V3-1A, V3-1B, V3-1C, V3-1E, V3-1G 3-34 to 3-40, Appendix V3-3A
2.0 GUIDING PRINCIPLES	2.2 PUBLIC PARTICIPATION AND ENGAGEMENT		The NIRB Review process requires the development of a public participation and awareness program to initiate engagement of the public during the initial stages of the Review, and to facilitate meaningful consultation with those communities potentially affected by a proposed project.	3	1	1.3, 1.4, 1.5, 1.6, Table 1.6-1, 1.7, Appendices V3-1A, V3-1B, V3-1C, V3-1E, V3-1G	-	1-5 to 1-44, Appendices V3-1A, V3-1B, V3-1C, V3-1E, V3-1G
2.0 GUIDING PRINCIPLES	2.2 PUBLIC PARTICIPATION AND ENGAGEMENT		The Proponent must provide the highlights of any public engagement within the EIS, including the methods used, the results, and the ways in which the Proponent intends to address the concerns identified.	3	1	1.3, 1.4, 1.5, 1.6, Table 1.6-1, 1.7, Appendices V3-1A, V3-1B, V3-1G	-	1-5 to 1-44, Appendices V3-1A, V3-1B, V3-1G
2.0 GUIDING PRINCIPLES	2.3 TRADITIONAL KNOWLEDGE		The Proponent shall not only incorporate TK into the baseline collection and methodologies, but further outline where management strategies, mitigation and monitoring plans, and/or operational considerations employ values of the Inuit Qaujimajatuqangit.	3	3	3.1.3, Table 3.1-1, 3.3	-	3-2 to 3-32, 3-39 to 3-42
2.0 GUIDING PRINCIPLES	2.3 TRADITIONAL KNOWLEDGE		The Proponent must incorporate into the EIS the TK to which it has access or the TK that it may reasonably be expected to acquire through appropriate due diligence, in keeping with appropriate ethical standards and without breaching obligations of confidentiality.	3	3	3.2, Appendices V3-3A, V3-3B	-	3-34 to 3-39, Appendices V3-3A, V3-3B
2.0 GUIDING PRINCIPLES	2.4 PRECAUTIONARY PRINCIPLE		The Proponent must demonstrate that the proposed Project is examined in a manner consistent with the precautionary principle in order to ensure that they do not cause serious or irreversible damage to the environment.	2 9	2 1	2.1.4 1.2.3, 1.3.4	-	2-2 to 2-3 1-4 to 1-17, 1-37 to 1-45
2.0 GUIDING PRINCIPLES	2.4 PRECAUTIONARY PRINCIPLE		The Proponent must outline the assumptions made about the effects of the proposed Project and the approaches to minimize these effects, including assumptions that are developed where scientific uncertainty exists	2 9	9 1, 2	9.1, 9.2 1.2.4.3, 1.3.5.1, 1.3.5.2, All	-	9-1 to 9-6 1-25 to 1-26, 1-46 to 1-47, 2-1 to 2-21
2.0 GUIDING PRINCIPLES	2.4 PRECAUTIONARY PRINCIPLE		The Proponent must identify any follow-up and monitoring activities planned, particularly in areas where scientific uncertainty exists in the prediction of effects	1 9 10	10 1 All	10.1, 10.2, 10.3, 10.4, 10.5 1.2.3.1, 1.2.4.4, 1.3.5.3 All	-	10-1 to 10-9 1-4 to 1-16, 1-27, 1-46 to 1-47 All
2.0 GUIDING PRINCIPLES	2.4 PRECAUTIONARY PRINCIPLE		The Proponent must present public views on the acceptability of these effects.	3	1, 3	1.6.2.3, 3.3.3	Public views provided with FEIS	1-36, 3-40 to 3-41
2.0 GUIDING PRINCIPLES	2.5 SUSTAINABLE DEVELOPMENT		The EIS should clearly demonstrate how the Project preserves ecosystem integrity, including the capability of natural systems (local and regional) to maintain their structure and functions and to support biological diversity.	2	2	2.1.3	-	2-2
2.0 GUIDING PRINCIPLES	2.5 SUSTAINABLE DEVELOPMENT		The EIS should clearly demonstrate how the Project respects intergenerational equity. That is, the right of future generations to the sustainable use of renewable and non-renewable resources depends on our commitment to those resources today.	N/A	N/A	N/A	This will be addressed in detailed design, FEIS	N/A

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
2.0 GUIDING PRINCIPLES	2.5 SUSTAINABLE DEVELOPMENT		The EIS should clearly demonstrate how the Project attains durable social and economic benefits, particularly in Nunavut.	2	1	1.8	-	1-6 to 1-19
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.5		The EIS will contain a Project description, including the purpose and need for the Project.	2	All	All	-	All
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.6		The EIS will contain anticipated ecosystemic and socio-economic impacts of the Project.	4, 5, 6, 7, 8, 9, 10	All	All	-	All
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.7		The EIS will contain anticipated effects of the environment on the Project	9	2	All	-	All
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.8		The EIS will contain steps which the Proponent proposes to take, including any contingency plans, to avoid and mitigate adverse impacts.	1 4 5 6 7 8 10	7, 10, 11 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 All	All	-	All
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.9		The EIS will contain steps which the Proponent proposes to take to optimize benefits of the Project, with specific consideration being given to expressed community and regional preferences as to benefits.	2 3	2 1	2.1.7 1.6.3	Table 1.6-1	2-4 to 2-5 1-36 to 1-44
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.10		The EIS will contain steps which the Proponent proposes to take to compensate interests adversely affected by the Project.	2 9	5 1	5.8 1.2.4.3	-	5-3 1-25 to 1-26
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.11		The EIS will contain the monitoring program that the Proponent proposes to establish with respect to ecosystemic and socio-economic impacts.	1 10	10 All	10.1, 10.2, 10.3, 10.4, 10.5 All	-	10-1 to 10-9 All
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.12		The EIS will contain the interests in land and waters which the Proponent has secured, or seeks to secure.	1	Appendix V1-3	All	-	All
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.13		The EIS will contain options for implementing the proposal.	2	4	4.1, 4.2, 4.3	-	4-1 to 4-22
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.14		The EIS will contain any other matters that NIRB considers relevant.	3	1 3	1.5.1 3.2.5	-	1-19 3-38 to 3-39
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.15		The EIS will demonstrate whether the project would enhance and protect the existing and future well-being of the residents and communities of the Nunavut Settlement Area, taking into account the interests of other Canadians	2 10	1 23, 26	1.8 3, All	-	1-6 2 to 3, All
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.16		The EIS will demonstrate whether the project would unduly prejudice the ecosystemic integrity of the Nunavut.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5, X.6, X.7	-	1-15 to 1-29, 2-11 to 2-35 4-26 to 4-62, 5-114 to 5-147, 6-35 to 6-76, 7-19 to 7-61, 8-30 to 8-88, 9-30 to 9-56, 10-21 to 10-50 1-41 to 1-52, 4-35 to 4-58, 5-21 to 5-41, 6-53 to 6-67, 7-35 to 7-46 2-16 to 2-40, 3-12 to 3-31, 4-36 to 4-43, 5-19 to 5-27, 6-18 to 6-44, 7-15 to 7-36 1-15 to 1-33, 3-37 to 3-110, 4-32 to 4-77, 5-19 to 5-43
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.17		The EIS will demonstrate whether the proposal reflects the priorities and values of the residents of the Nunavut Settlement Area.	1 10	1 26,28	1.4 All	-	1-3 to 1-5 All
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.18		The EIS will demonstrate steps which the proponent proposed to take to avoid and mitigate adverse impacts.	1 4 5 6 7 8 10	7, 10, 11 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 All	All	-	All
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.19		The EIS will demonstrate steps which the Proponent proposes to take, or that should be taken, to compensate interests adversely affected by the project.	-	-	-	To be negotiated with the KIA and will be discussed more in the FEIS.	N/A
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.20		The Proponent will post performance bonds.	-	-	-	To be negotiated with the KIA and will be discussed more in the FEIS.	N/A
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.21		The EIS will contain the monitoring program that the Proponent proposes to establish, or that should be established for ecosystemic and socio-economic impacts.	1 10	10 All	All	-	All
3.0 SCOPE OF THE NIRB ASSESSMENT	3.1 NLCA - SECTIONS 12.5.2 AND 12.5.22		The EIS will contain steps which the Proponent proposes to take, or that should be taken, to restore ecosystemic integrity following project abandonment.	1 2 10	9 8 29	All All 1, 2, 3, 4	-	All All 1-41
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.1 PRESENTATION		The Proponent shall provide an EIS that is complete and which provides sufficient information to identify, describe and determine the significance of potential impacts to the ecosystemic and socio-economic environments that could arise from the Project. The EIS should include scientific works, subject-specific studies and all other sources of information covering all aspects of the Project in regards to ecosystemic and socio-economic perspectives.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	All	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.1 PRESENTATION		For clarity and ease of reference, the EIS should be presented in the same order as the EIS Guidelines. However, the NIRB recognizes that flexibility in the arrangement of the document may be required and the Proponent is encouraged to use its judgment and best practices in designing a document that is arranged and formatted to facilitate ease of reviewing while ensuring that all the information requested in these Guidelines are provided. In the interest of brevity, the EIS should make reference to, rather than repeat, information that may be presented in other sections of the document.	All	All	All	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.1 PRESENTATION		An index of the EIS document is also required and must provide a reference to the locations of required information by volume, section, sub-section, and page number.	1	Appendices V1-7, V1-8	-	-	Appendices V1-7, V1-8

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.1 PRESENTATION		The EIS shall be made available to the NIRB electronically on searchable CD-ROM and/or memory stick, as well as in hard copy. If the Proponent chooses to submit the EIS via memory stick only, it shall be responsible to provide CD-ROM versions of the EIS if requested by the NIRB or parties.	-	-	-	Memory stick, will provide CD-ROM if requested	N/A
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.1 PRESENTATION		For purposes of uploading distribution, individual file sizes should be no larger than 5 MB in size (using only low resolution images). If the Proponent determines that certain files are better presented with larger resolution, then these files should be submitted to the NIRB, however it should be noted that these files may only be distributed by the NIRB upon request, and that in this case, the Proponent may be required to provide hard copy mailings of such items.	-	-	-	An electronic version of the DEIS in 5 MB or less files will be provided to NIRB for posting on the NIRB FTP site	N/A
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.1 PRESENTATION		Where certain volumes or sections of the EIS may exceed the 5 MB limit, the Proponent is required to break these files into manageable sizes for submission to the NIRB, in a manner that facilitates parties' ease of navigation of such files.	-	-	-	An electronic version of the DEIS in 5 MB or less files will be provided to NIRB for posting on the NIRB FTP site	N/A
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.2 CONFORMITY		The EIS shall contain a concordance table directing reviewers to the location (volume/document, section, sub-section, and page number) where specific information addressing the Guidelines and the NIRB's Minimum EIS Requirements may be found.	1	Appendix V1-1	-	-	Appendix V1-1
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.2 CONFORMITY		For each item in the concordance table, the Proponent is also requested to provide a reference to the appropriate EIS Guideline section for the ease of parties' review.	1	Appendix V1-1	-	-	Appendix V1-1
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.2 CONFORMITY		This concordance table shall further include, where applicable, an indication of what information, details, or data the Proponent has deferred from its current submission and which it plans to include in the Final EIS. Where the Proponent is unable to provide information until submission of a Final EIS, it shall further provide within the concordance table, its rationale for deferring the inclusion of such information.	1	Appendix V1-1	-	-	Appendix V1-1
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.2 CONFORMITY		It is possible that the EIS Guidelines include matters that, in the judgement of the Proponent, are not relevant or significant to the Project. If that definition of such matters results in omissions from the EIS, those instances must be clearly indicated and the Proponent should explain and justify its reasoning for each omission identified, so that the public and other interested parties have an opportunity to comment on this judgement. Where any differences in direction are encountered between the NIRB's most recent guidance on the preparation of EIS documentation (Guide 7 (NIRB, 2006b) or any subsequent replacement Guide in force at the time the EIS is being prepared) and the EIS Guidelines issued pursuant to the NLCA Section 12.5.2, the Proponent may be required to provide the additional information. The Proponent is advised to consult with the NIRB on any direction presented within these Guidelines on which it plans significant deviation.	duly noted	-	-	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.3 LENGTH		The Proponent's EIS Main Document (i.e., Volume I) shall be concise and not exceed 150 pages without permission from the NIRB. The 150 page limit shall not include: the Title Page, Executive Summary, Popular Summary, Glossary, Table of Contents, Concordance Table, Consultants and Organizations, Appendix, and References.	1	All	All	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.3 LENGTH		Any data of a detailed nature shall be contained in separate volumes as appendices and technical reports submitted in support of the main document.	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	All	All	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.3 LENGTH		The Proponent must submit a list of all documents, supporting maps, figures, documents, and tables used as reference materials throughout the EIS.	1	Appendices V1-7, V1-8	-	-	Appendices V1-7, V1-8
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall have sections numbered and be presented in a fully functional PDF format which supports electronic linkages between and among the Table of Contents and associated sections within the EIS document(s).	All	All	All	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The digital EIS document must be fully indexed and searchable using keywords.	All	All	All	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain a cover sheet with a Project description.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	Cover	-	-	N/A
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain an executive summary (in English, Inuinnaqtun and Inuktitut).	1	Executive Summary	-	Additional executive summaries can be found in volumes 2-9	N/A
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain a plain language summary/popular summary (in English, Inuinnaqtun and Inuktitut).	1	Plain Language Summary	-	-	N/A
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain a glossary (in English, Inuinnaqtun and Inuktitut).	1	Glossary	-	-	N/A

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain a Table of Contents.	All	Table of Contents	-	-	N/A
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain a concordance table which lists each of the Guideline requirements and the associated location of each within the EIS.	1	Appendix V1-1	-	-	Appendix V1-1
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain a purpose of, and need for, the Project.	2	1	1.8	-	1-6
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain a detailed Project description including potential future development.	2	2 3 6 7 8	All	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain alternatives considered in the development of the Project proposal.	2	4	4.1, 4.2, 4.3	-	4-1 to 4-22
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain a discussion of the public consultation initiatives with the communities potentially affected by the Project. Provide the results of the public consultation, as well as evidence that community concerns were addressed in the planning of the Project activities.	3	1	1.3, 1.4, 1.5, 1.6, Table 1.6-1, 1.7, Appendices V3-1A, V3-1B, V3-1C, V3-1E, V3-1G	-	1-5 to 1-44, Appendices V3-1A, V3-1B, V3-1C, V3-1E, V3-1G
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain baseline information and studies of the existing ecosystem and socio-economic environment.	4 5 6 7 8	All	X.1	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-19, 7-1 to 7-12, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-31, 2-1 to 2-28, 3-1 to 3-16, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-30, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-11, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain anticipated ecosystemic and socio-economic impacts of the Project proposal, including potential impacts on the VECs and VSECs (and as identified through the public consultation process).	3 4 5 6 7 8	1 1, 2 4, 5, 6, 7, 8, 9, 10 1, 3, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	1.6.2 All All All All All	-	1-35 to 1-36 All All All All All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain anticipated effects of the environment on the Project.	9	2	All	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain anticipated cumulative effects of the Project on the region/regions.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 3, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.6	All cumulative effects sections	1-28 to 1-29, 2-33 to 2-35 4-62 to 4-68, 5-114 to 5-147, 6-62 to 6-76, 7-45 to 7-60, 8-65 to 8-88, 9-54 to 9-56, 10-48 to 10-50 1-51 to 1-52, 4-56 to 4-58, 5-39 to 5-41, 6-67, 7-44 to 7-45 2-39 to 2-40, 3-29 to 3-31, 4-43, 5-25 to 5-27, 6-35 to 6-44, 7-36 1-32 to 1-33, 3-92 to 3-106, 4-58 to 4-73, 5-43
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain anticipated transboundary effects.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.7	All transboundary sections	1-29, 2-35 4-68, 5-147, 6-76, 7-61, 8-88, 9-56, 10-50 1-52, 4-58, 5-41, 6-67, 7-46 2-40, 3-31, 4-43, 5-27, 6-44, 7-36 1-33, 3-106 to 3-110, 4-73 to 4-76, 5-43
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain anticipated accidents and malfunctions, and potential effects on the environment, include contingency plans and mitigation measures.	9 10	3, Appendix V9-3A 3, 6, 14, 15	All 4.1, 4.3, 8, 9, 8.4, 9	-	All, Appendix V9-3A 3-13, 3-14, 6- 23 to 6-29, 14-21 to 14-22, 15-12 to 12-14
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain steps which the Proponent proposes to take to avoid and/or mitigate adverse impacts, including contingency plans (spills, fires, floods, etc.) and adaptive management strategies.	1 4 5 6 7 8 10	7, 10, 11 1, 2 4, 5, 6, 7, 8, 9,10 1, 3, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 All	All	-	All

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain a statement of residual impacts and significance.	1 4 5 6 7 8	6, 8 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	All 1.5.5, 1.10, 2.5.5, 2.10 4.5.5, 4.5.9, 5.5.5, 5.10, 6.5.5, 6.10, 7.5.5, 7.10, 8.5.5, 8.10, 9.5.5, 9.10, 10.5.5, 10.10 1.5.5, 1.9, 4.5.5, 4.10, 5.5.5, 5.10, 6.5.5, 6.10, 7.5.5, 7.10 2.5.5, 2.10, 3.5.5, 3.10, 4.5.4, 4.10, 5.5.5,, 5.10, 6.5.5, 6.10, 7.5.4, 7.10 1.5.5, 1.10, 3.5.6, 3.10, 4.5.5, 4.10, 5.5.5, 5.10		All 1-26-27, 1-30 to 1-31, 2-33, 2-37 4-60 to 4-62, 4-70 to 4-71, 5-114, 5-155 to 5-116, 6-61 to 6-62, 6-83 to 6-84, 7-45, 7-66 to 7-67, 8-65, 8-94 to 8-95, 9-54, 9-62 to 9-63, 10-48, 10-55 to 10-56 1-49 to 1-51, 1-53, 4-56, 4-62 to 4-63, 5-39, 5-45, 6-67, 6-72, 7-44, 7-50 to 7-51 2-37 to 2-38, 2-44, 3-29, 3-35, 4-43, 4-46 to 4-47, 5-25, 5-31 to 5-32, 6-35, 6-50 to 5-51, 7-36, 7-42 1-30 to 1-32, 1-35, 3-88 to 3-92, 3-115 to 3-116, 4-55 to 4-58, 4-80 to 4-81, 5-43, 5-44
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain steps which the Proponent intends to undertake in order to restore the area affected by the Project activities during operation and upon project closure, reclamation and relinquishment of leased land to original landowners.	1 2 10	9 8 29	All All 1, 2, 3, 4	-	All All 1-41
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain steps which the Proponent proposes to take to optimize benefits of the Project, with specific consideration being given to expressed community and regional interests.	2 3	5 1	All 1.6.3	Table 1.6-1	All 1-36 to 1-44
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain the monitoring program that the Proponent proposes to establish.	10	All		-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain the interests in lands and waters which the Proponent has secured, or seeks to secure.	1	Appendix V1-3	-	-	Appendix V1-3
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain lists of permits, licences and authorizations required to undertake the Project proposal.	1	Appendix V1-2	-	-	Appendix V1-2
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain a list of consultants or individuals who assisted in preparation of the EIS.	1	Appendix V1-4	-	-	Appendix V1-4
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain a list of agencies, organizations, and persons to whom copies of the EIS will be sent.	1	Appendix V1-5	-	-	Appendix V1-5
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain an index.	1	Appendix V1-7	-	-	Appendix V1-7
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.4 FORMAT		The EIS shall contain supporting documentation and appendices, including a commitments table that summarizes the proposed mitigation and other company commitments with cross reference to environmental issues or potential impacts.	1	Appendix V1-6	-	-	Appendix V1-6
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.5 DATA PRESENTATION		The Proponent shall provide charts, diagrams, photographs, and maps (each of which clearly defines land ownership, provides a scale and indicates a north arrow) within the EIS document.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	All	-	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.5 DATA PRESENTATION		The Proponent shall include maps or diagrams showing all project related infrastructure and/or activities (e.g., RSA, LSA, camp sites, drilling activities, dock sites, fuel storage and laydown areas, mine site and infrastructure, transportation routes including ground transport, marine shipping and air transport, borrow pits and quarry sites, etc.). It is recommended that maps be scaled appropriately to best present materials and where feasible, to be of a common scale and projection to facilitate comparison.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	All	-	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.5 DATA PRESENTATION		All charts, diagrams, photographs, and maps must be clearly referenced in the text of the EIS, especially where these may be included in a separate volume to the main EIS document.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	All	-	-	All
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.6 SUMMARIES	4.6.1 Executive Summary (in English, Inuinnaqtun, and Inuktitut)	The Proponent shall prepare an Executive Summary that describes the key Project elements and key findings of the EIS, with particular reference to the overall conclusions of the assessment, and a clear rationale relating those conclusions to the predicted impacts and the measures proposed to address them. The Executive Summary shall focus on items of known or expected public concern and the significant potential impacts of the Project and the methods proposed to address them. It shall also address outstanding issues and the strategies proposed to address them. The Executive Summary shall form part of the EIS, but it shall also be made available as a stand-alone document and must be provided in English, Inuinnaqtun and Inuktitut.	1	Executive Summary	-	-	N/A

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.6 SUMMARIES	4.6.2 Popular Summary (in English, Inuinnaqtun, and Inuktitut)	The Popular Summary shall have the same general structure and objectives as the Executive Summary, but is to be written in non-technical language and include such things as a glossary and additional explanatory text to assist non-specialists in appreciating the content of the EIS as a whole. Maps indicating major project components including shipping and ground transportation route(s), as well as the potentially affected communities shall be included, and the summary is to be provided in English, Inuinnaqtun and Inuktitut. The Popular Summary shall form part of the EIS, but it shall also be made available as a stand-alone document.	1	Plain Language Summary	-	-	N/A
4.0 GUIDANCE ON THE PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT	4.7 TRANSLATION		In addition to the Executive Summary, Popular Summary and Glossary being presented in English, Inuinnaqtun and Inuktitut within the EIS, the summary for each thematic volume shall also be translated into Inuinnaqtun and Inuktitut. If these summaries are included in a separate binder, this binder must be referenced within the EIS and be compiled for ease of reference. Maps shall indicate common and accepted place-names usually referred to by the local populations in their own language(s), in addition to official toponyms, especially where traditional Inuit place-names have been made official through the process outlined in Section 33.9 of the NLCA.	2, 3, 4, 5, 6, 7, 8, 9, 12	Executive Summary	-	-	N/A
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall identify itself and explain current and proposed ownership of rights and interests in the Project, operational arrangements, and corporate and management structures.	2	1	1.1, 1.3	-	1-1
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall specify the mechanisms used to ensure that corporate policies are respected.	2	1	1.1	-	1-1
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall present its environmental policy and shall specify how it applies to all businesses for which the Proponent has an operational responsibility (i.e., employees, contractors, subcontractors and suppliers), as well as describe its environmental reporting systems.	2	9	All	-	All
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall provide complete contact information, including telephone and fax numbers, postal and email addresses, and shall include, where necessary, separate addresses for its corporate, operations, or other relevant offices.	2	1	1.1	-	1-1
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall describe its past and/or present experience in the activities being proposed for the Project (e.g. exploration, open pit and underground mining, transportation networks involving air shipping, marine shipping, and winter and all-weather road components, etc.).	2	1	1.1, 1.7	-	1-1, 1-7
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall identify its record of compliance with governmental policies and regulations pertaining to environmental and socio-economic issues in past operations.	2	1	1.1	-	1-1
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall identify its operation safety, major accidents, spills and emergencies, and corresponding responses.	2	1	1.1	-	1-1
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall identify its record in honouring commitments on environmental and socio-economic matters in the event of planned or premature Project closure, whether temporary or permanent, or due to change of ownership.	2	1	1.1, 1.5	-	1-1, 1-2 to 1-5
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall identify its relations with Aboriginal peoples, including prior experience with any Impact and Benefits Agreements if appropriate.	2	1	1.1, 1.8	-	1-1, 1-19
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall identify its operations in Arctic and Sub-arctic regions.	2	1	1.2	-	1-2
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall identify its record in incorporating environmental and socio-economic considerations into construction, operations, maintenance, temporary closure (care & maintenance), final closure (decommission & reclamation), and post-closure.	2	1	1.1	-	1-1
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall identify corrective actions undertaken in the past, distinguishing between those taken voluntarily and those taken at the insistence of a third party.	2	1	1.1	-	1-1
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall identify and describe any obligations or requirements that it must meet to post a bond or other forms of financial security to ensure payment of compensation in the event of accidents that directly or indirectly result in major damage by the Project to the environment, as well as to cover the cost of planned or premature closure, whether temporary or permanent.	2	1	1.1	-	1-1
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		The Proponent shall provide information on the current status of Project financing, and financial preparedness to meet the requirements for reclamation and security should the Project proceed.	2	1, 8	1.1, 8.2, 8.3	-	1-1, 8-2, 8-3
5.0 INTRODUCTION	5.1 PROPONENT INFORMATION		If the Proponent does not have prior experience in exploration, mining, or transportation networks, particularly within this region, discussion should include how the experience will be obtained (e.g., other northern projects) and it shall explain the safeguards that it intends to put in place to compensate for a lack of experience.	N/A	N/A	N/A	Sabina has prior experience	N/A
5.0 INTRODUCTION	5.2 REGULATORY REGIME		The Proponent shall present its understanding of the applicable regulatory regime by identifying the requirements of all relevant federal, territorial, and local environmental and socio-economic standards, laws, regulations, policies, guidelines and fiscal regimes relating to Project approval, construction, operations, maintenance and monitoring, temporary closure (care & maintenance), final closure (decommission & reclamation), and post-closure activities. This section should also explain how the requirements would be met and what specific governmental permits and approvals would be required. A list of currently held and required permits and licences, including dates of issue and expiry (as applicable), shall be appended. Requirements imposed by Article 12 of the NLCA may be excluded from this discussion.	2	1, 2	1.5, 2.3	-	1-2, 1-9, 2-6, 2-7
5.0 INTRODUCTION	5.3 REGIONAL CONTEXT		The Proponent shall describe in general terms the regional biophysical and socio-economic environments of the Kitikmeot Region and Nunavut as a whole, including: ecological land classifications, ecological processes and relationships, the location of other base and precious metal finds and other existing and potential developments, and current and future land use plans.	2 8	1 3	1.2 3.1, 3.6.2	-	1-2 3-1 to 3-21, 3-98

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
5.0 INTRODUCTION	5.4 LAND TENURE		The Proponent shall delineate on a map of suitable scale the legal boundaries of any areas to which it will acquire rights through lease or other tenure arrangements, including Crown land, Inuit Owned Land, and Commissioner’s land. It shall further describe those areas by providing such information including, but not limited to, file numbers, start and end dates, fees, name of right holder and any post-authorization amendments and/or renewals. Ongoing exploration activities should be discussed wherever applicable to the discussion of Project land tenure.	2	1	1.3	-	1-2, 1-4 to 1-6
5.0 INTRODUCTION	5.5 ANALYSIS OF NEED AND PURPOSE OF THE PROJECT		The Proponent will address general feasibility from an economic perspective, including how this Project will benefit communities in Nunavut, either directly or indirectly.	2 8	1, 5 3	1.8, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9 All	-	1-6, 1-19, 5-1 to 5-4 All
5.0 INTRODUCTION	5.5 ANALYSIS OF NEED AND PURPOSE OF THE PROJECT		The Proponent will assess the longer term strategic implications of the Project, and how it may affect or lend to transportation networks (existing and proposed) in Nunavut.	2	1	1.8	-	1-6, 1-19
5.0 INTRODUCTION	5.5 ANALYSIS OF NEED AND PURPOSE OF THE PROJECT		The Proponent will identify past, current and potential future users of the local study area (LSA), regional study area (RSA), and project infrastructure, including commercial, government, public, and private.	2 8	1, 2 3	1.8, 2.1.9 3.6	-	1-6, 1-19, 2-5 3-92 to 3-106
5.0 INTRODUCTION	5.5 ANALYSIS OF NEED AND PURPOSE OF THE PROJECT		The Proponent will analyze the overall net benefit of the Project in terms of Nunavut and of Canada as a whole, which includes considerations that are not related to economics.	2 8	1, 5 3	1.8, 5.1, 5.2, 5.3, 5.4, 5.5 3.10	-	1-6, 1-19, 5-1 to 5-2 3-115 to 3-116
5.0 INTRODUCTION	5.5 ANALYSIS OF NEED AND PURPOSE OF THE PROJECT		Discussions addressing the preceding four points shall be supported by an analysis of the positive and negative social and economic effects on existing industries, markets, and communities over the life of the Project.	8	1,3,4,5	1.6,3.6,4.6,5.6	-	1-32, 3-92 to 3-102, 4-58 to 4-73,5-43
5.0 INTRODUCTION	5.5 ANALYSIS OF NEED AND PURPOSE OF THE PROJECT		The analysis should also indicate the distribution and magnitude of benefits and/or losses to specific socio-economic groups in the relevant study area.	2 8	5 1,3,4,5	5.1, 5.2, 5.3, 5.4, 5.5, 5.7 1.6,3.6,4.6,5.6	-	5-1 to 5-3 1-32, 3-92 to 3-102, 4-58 to 4-73,5-43
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		The EIS shall include an explanation of how the biophysical environment has influenced the design of the Project. This should include consideration of relevant geographical, geological, meteorological, hydrological, hydrogeological and oceanographic conditions.	9	2	All	-	All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		The EIS shall include 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.	2 9	2 2	2.1.2 2.15, 2.16	-	2-1 2-20, 2-21
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		The EIS shall include a discussion of how design, engineering, and management plans will maintain/enhance the existing eco-systemic integrity, focusing on various wildlife habitats, including freshwater habitat, marine habitat, and terrestrial habitat.	10	1, 20	1, 6	-	1-1 to 1-3, 6-4 to 6-19
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		The EIS shall include a discussion of how the Proponent has applied the precautionary principle in its Project planning, design and management.	2 10	2 1	2.1.4 4.1	-	2-2 1-4
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		The EIS shall include a discussion of how potential impacts to workers and the public under both normal operations and potential accident and malfunction situations have influenced the design of the Project.	9 10	3 25	All	-	All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		The EIS shall describe how potential impacts to wildlife (e.g., caribou, polar bear and peregrine falcons) have influenced the design of the Project, indicating methods designed to minimize impacts to wildlife, including the geographical location of project components. Special attention should be paid to the influence of raptor habitat on the selection of borrow pits and quarry sites (where applicable).	5 7	5, 6, 7, 8, 9, 10 6, 7	X.5.3, 5.5.8 6.5.3, 7.5.3	-	5-77 to 5-79, 5-147 to 5-152, 6-30 to 6-31, 6-76 to 6-81, 7-15 to 7-15, 7-61 to 7-64, 8-28 to 8-29, 8-88 to 8-92, 9-28 to 9-29, 9-56 to 9-60, 10-17 to 10-18, 10-50 to 10-54 6-16 to 6-17, 6-44 to 6-49, 7-11 to 7-12, 7-36 to 7-40
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		The EIS shall describe how regional socio-economic conditions have influenced the Project design. For example, how local preferences and labour capacity, have influenced the design of work rotations, pace of construction, employment policy, etc.	2 8 10	2, 4 3, 4 28	2.1.7, 4.3.7 All 7.1.3, 7.1.4, 7.1.5, 7.2, 7.3, 7.4	The Human Resources Plan was developed in consideration of regional socio-economic conditions. This management plan incorporates project design elements as influenced by socio-economic conditions.	2-4, 2-5, 4-21, 4-22 All 28-8 to 28-16
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		The EIS shall describe how the distribution of archaeological resources, sacred sites, and soapstone quarries have influenced project design.	2 5 8	2 1 1	2.1.8 1.2 1.5, Appendix V8-1A	-	2-5 1-12 to 1-13 1-16 to 1-32, Appendix V8-1A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		The EIS shall describe how current land use activities such as harvesting, camping, and tourism, as well as protected areas (i.e. Bird and Wildlife Sanctuaries) have influenced project design.	5 7 8	5, 6, 7, 8, 9, 10 6, 7 4	X.5.3, 5.5.8 6.5.3, 7.5.8 4.1, 4.2, 4.3	-	5-145, 5-147, 6-56, 7-40, 8-58, 9-50, 10-45 6-32 to 6-34 4-1 to 4-7, 4-21 to 24, 4-26 to 4-29
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		The EIS shall describe how public consultation and TK have influenced the planning and design of the Project.	3	1, 3	1.6.2, 3.1.1, 3.1.2, 3.3	-	1-35 to 1-36, 3-1, 3-39 to 3-42
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		The EIS shall include considerations for future development.	2	3	All	-	All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.1 PROJECT DESIGN		All assumptions underlying design features which are relevant to environmental assessment should be explicitly identified.	2 4 5, 6, 7, 8 9	2 1, 2, 3 X 2	2.1 1.8, 2.1.1, 3.4.3.1 X.8 All	-	All 1-29, 2-35, 3-29, 4-68 to 4-70, 5-149 to 5-150, 6-78 to 6-79, 7-62 to 7-63, 8-89 to 8-90, 9-57 to 9-58, 10-51 to 10-52, 1-52, 4-58, 5-41, 7-46, 2-40, 3-31, 4-43, 5-27, 6-44, 7-36, 1-33, 3-110, 4-77, 5-43 All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.2 PROJECT PHASES		The Proponent is required to present an overall development plan describing the Project development phases (site preparation, construction, operation, maintenance, any potential modifications, temporary closure, final closure, and post-closure), relevant timeframes, works and undertakings associated with each of these phases.	2	2	2.2	-	2-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.2 PROJECT PHASES		The plan must consideration for temporary closure, or care & maintenance in the possibility that operations are unexpectedly suspended.	10	29	2	-	29-13 to 29-16

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.2 PROJECT PHASES		The Proponent should identify all associated monitoring and/or mitigation plans to be implemented in each of the development phases to eliminate or minimize adverse effects that might occur at various project stages for each Project element.	10	1	1.13	-	1-13 to 1-17
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.3 FUTURE DEVELOPMENT		The Proponent shall describe its plans for development of the Project, and shall further, evaluate any foreseeable expansions of the current Project, needs for required or additional infrastructure and the associated eco-systematic and socio-economic impacts.	2	3	All	-	All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.3 FUTURE DEVELOPMENT		The Proponent shall evaluate the potential for development of additional ore deposits in the Project area in accordance with previous and current exploration activities. Such an evaluation should be based on the Proponent's business and strategic plans for the Project, other predictions and the comparable development realized by projects of a similar nature.	2	3	All	-	All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.3 FUTURE DEVELOPMENT		The Proponent shall discuss how their foreseeable future developments scenarios have been taken into consideration when designing the infrastructure and ancillary utilities for the Back River project.	2	3	All	-	All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.3 FUTURE DEVELOPMENT		The Proponent's assessment of cumulative impacts of the Project shall also include their future development outlined in the preceding scenarios.	N/A	N/A	N/A	To be provided with the FEIS	N/A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		The EIS shall include an explicit analysis of all alternative means of carrying out the Project components or activities, including a "no-go" alternative, the identification and application of criteria used to determine the technical feasibility and economic viability of the alternatives to the Project (e.g. transportation, natural, social, economic and cultural environment).	2	4	4	-	4-1 to 4-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		This analysis must be done to a level of detail which is sufficient to allow the NIRB and the public to compare the Project with the alternatives in terms of the economic and environmental costs, as well as the social and economic impacts and/or benefits.	2	4	4	-	4-1 to 4-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		The Proponent must include reasons for selection of the Project as the preferred alternative, and the reasons for the rejection of other alternatives.	2	4	4	-	4-1 to 4-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		The reasoning should outline the environmental and social impacts and benefits in addition to the economic costs of non-viable or rejected alternatives.	2	4	4	-	4-1 to 4-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		Through the course of its alternative assessment, if the preferred option changes, the Proponent should consult with the NIRB to determine whether this proposed change would result in a change to the scope of the Project as filed with the Board.	2	4	4	-	4-1 to 4-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		The EIS shall present alternatives for all Project components. The Proponent is encouraged to refer to Environment Canada's Guidelines for the Assessment of Alternatives for Mine Waste Disposal (September 2011), when assessing and presenting alternatives for mine waste management, including tailings and waste rock storage options, with a focus on the following:	2	4	4	-	4-1 to 4-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		i. Options proposed for the transportation of supplies to the Project site via air and marine shipment,	2	4	4.2.2, 4.2.3, 4.2.4	-	4-3 to 4-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		ii. The location of tank farm(s) and storage facilities on site,	2	4	4.3.6	-	4-21
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		iii. Options for proposed airstrips,	2	4	4.2.2.1	-	4-3 to 4-4
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		iv. Options for quarry sites,	2	4	4.3.1.3	-	4-14 to 4-15
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		v. Options for water sources,	2	4	4.3.2.1, 4.3.2.2, 4.3.2.3	Freshwater source unavailable at MLA	4-15 to 4-18
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		vi. Access to all identified ore deposits by underground or open pit methods and include potential infrastructure layouts,	2	4	4.2.5.1	-	4-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		vii. Alternative road access to all identified ore deposits for transportation or ore and equipment required at each deposit,	2	4	4.2.3, 4.2.5.1, 4.2.5.2	-	4-7 to 4-9
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		viii. Alternatives for processing the ore,	2	4	4.2.6	-	4-10, 4-11
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		ix. Alternatives for cyanide,	2	4	4.2.6.2	-	4-11
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		x. Alternatives for tailings storage,	2	4	4.2.7	-	4-11, 4-12
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		xi. Alternatives to diesel power generation, including solar energy, wind energy, hydro and geothermal energy, etc.,	2	4	4.2.8	-	4-12
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		xii. Closure and reclamation options,	2	4	4.2.9	-	4-12, 4-13
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		xiii. Mine waste management and disposal,	2	4	4.2.5.2	-	4-9, 4-10
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		xiv. Waste rock storage/disposal alternatives,	2	4	4.2.5.2	-	4-9, 4-10
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		xv. Methods for site water treatment (i.e., mill, sewage, tailings, storm water, etc.), and	2	4	4.3.2, 4.3.3	-	4-15 to 4-20
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		xvi. Methods for mine de-watering.	2	4	4.3.3.1, 4.3.3.2	-	4-18, 4-19
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		The Proponent shall provide a detailed assessment of alternatives to the preferred option of a Proponent-owned all-weather road from the Back River site to a laydown area at Bathurst Inlet, including consideration for other potential users of such facilities at any point in the project lifecycle (public users, other development proponents, etc).	2	4	4.2.2.3	-	4-5 to 4-7

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		The Proponent shall also examine alternative options facilitating the transportation of materials,,for example, alternative port locations, road options (routing, winter vs. all-season) and ownership scenarios. Specifically, the Proponent shall describe any plans to utilize the proposed Bathurst Inlet Port and Road (BIPR) project infrastructure (NIRB File No. 03UN114) rather than a purpose-built road owned by the Proponent. In any instance where there is more than one preferred option identified, the Proponent must be prepared to support each with an appropriate level of impact assessment.	2	4	4.2.4, 4.3.1.2	-	4-7, 4-8, 4-14
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		In all cases, the Proponent must provide adequate supporting assessment to justify the discounting of technical feasible options or alternatives for project components. If at any point the Proponent wishes to change the preferred option to an identified alternative, this must be formally submitted to the NIRB for consideration and the possible amendment of these EIS Guidelines.	2	4	4.1	This will be addressed in detailed design, FEIS	4-1 to 4-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		In its assessment of the economic viability for each alternative option, the Proponent shall give due consideration to the vulnerability of the arctic ecosystem, as well as the potential for extension of the life of the Project. The criteria used to evaluate alternative means should reflect the potential concern for both the short-term (during construction and operations) and long-term (after decommissioning and reclamation), physical/chemical stability and environmental impacts of the Project.	2	4	4.1	This will be addressed in detailed design, FEIS	4-1 to 4-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		The potential for impacts from each alternative under consideration should be discussed within the context of potential interactions with other past, present and reasonably foreseeable developments in the RSA (i.e. cumulative effects), in accordance with Section 7.11. The potential cumulative effects for each alternative should be presented in enough detail so as to be comparable with the assessment for the identified “preferred alternative”.	2	4	4.1	This will be addressed in detailed design, FEIS	4-1 to 4-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.4 ALTERNATIVES		As indicated in the public consultation section (Section 7.1), public opinions and preferences shall also be taken into consideration as a criterion in the assessment for all of the alternative options. Therefore, the alternative analyses shall include a discussion on how public consultation has influenced Project design and planning, and how public preferences have been considered by the Proponent in determining the preferred project alternatives.	2	4	4.1	This will be addressed in detailed design, FEIS	4-1 to 4-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		The EIS shall include a description of the various economic components of the Project and its interactions with the over-arching economic and governing environments, including:	-	-	-	-	-
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		i. Non-confidential information pertaining to the potential taxation revenue to be contributed to the Federal and Territorial governments as well as anticipated royalties to be paid to NTI,	2 8	1, 5 3	1.8, 5.1.2, 5.9 3.5.2.2, 3.5.3.1	Table 1.8-1 Table 3.5-7 Royalties and direct corporate taxes may be presented in the FEIS.	1-6 to 1-19, 5-1, 5-3 to 5-4 3-42 to 3-53
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		ii. Estimates of initial property value as well as projections that incorporate the Proponent’s expected timeline for expansions (i.e., tank farms, plans, additional mines, etc.),	2	5	5.1, 5.2	Expansion timelines will be further vettted with detailed design, FEIS	5-1
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		iii. Potential employment available directly through the Project in terms of available labour and employment rates within the project RSA,	8	3	3.1.2.2, 3.3.1, Appendix V8-3B	Labour force and employment rates within the RSA; estimated direct employment associated with the Project.	3-3 to 3-5, 3-24 to 3-26, Appendix V8-3B
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		iv. An evaluation of the positive impacts that may result from increasing revenues accruing through taxes to governments as resulting from the Project,	8	3	3.5.3.1	-	3-43 to 3-54
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		v. An annual and project-life total estimate of the volume of fuel that is expected to be sourced from the GN and/or from other sources,	10	4	6.2, 6.3, 6.4, 6.5, 6.6	Table 6.6-1. All fuel is to be sourced from thrird parties. No fuel is to be soruced from the GN	4-4 to 4-14
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		vi. An estimate of total payroll tax to be paid each year and associated cost of living tax credit, taking into account: total remuneration per year paid to employees, an estimate of the number of employees (number of individuals and number of full-time equivalents), average wages paid to employees, and expected number of Project employees who will file taxes in the territory,	8	3	3.5.3.1, 3.5.3.3	Includes total estimated personal income effects, estimated number of employees, and average wages, as well as total taxes paid to the territorial and federal governments (of which income tax is a major component). Does not include discussion of cost of living tax credit. See also Economic Impact Model Report (Appendix V8-3B).	3-43 to 3-54, 3-57 to 3-69
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		vii. An estimate of annual personal income tax based on: expected number of employees who will file taxes in Nunavut, and estimated salaries for these employees,	8	3	3.5.3.1, 3.5.3.3	Presents Project-related contributions to territorial and federal tax revenues, of which personal income tax is a major component. Section 3.5.3.3 includes an estimate of average incomes, but does not include an estimate of personal income tax or number of employees expected to file taxes in Nunavut. See also Economic Impact Model Report (Appendix V8-3B).	3-43 to 3-54, 3-57 to 3-69
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		viii. An estimate of corporate income tax including: estimates of commodity prices and production, estimated number of years of production before initial corporate income tax payment, and an explanation of how the Proponent expects to allocate its corporate taxable income to permanent establishments in Nunavut,	-	-	-	To be presented in the FEIS.	-

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		ix. Capital costs, estimated operating costs, and the total expected revenues (using a range of market values),	8	3	3.5.3.1	Includes discussion of costs but does not include total expected Project revenues. See also Economic Impact Model Report (Appendix V8-3B).	3-43 to 3-54
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		x. The number of person years of work, broken down by Project life cycle stage including the number and types of jobs and required skills (using a recognized classification system) including training requirements for each position as well as an estimate of jobs created indirectly by the Project (i.e., local business and supply contracting),	8	3	3.5.3.2, 3.5.3.3, 3.5.3.4	Section 3.5.3.3 describes the number of person years of work broken down by Project life cycle stage, discussion of types of employment, as well as an estimate of jobs created by the Project. Local business supply and contracting are described in Section 3.5.3.2. Section 3.5.3.4 discusses training. Does not include training requirements of each position (www.BackRiverProject.com lists jobs and required skill and education levels).	3-54 to 3-73
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		xi. Information on benefits that might be expected by employees and whether these benefits will extend to contractor employees (e.g., training, skill enhancement, cultural support, wellness programs),	10	28	7.1, 7.3	Specified in the Human Resources Plan. It is currently not known if similar benefits will be extended to contractor employees, as this will be dependent on the individual contractors.	28-8 to 28-16
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		xii. Contracting and procurement information including, an estimate of the number and types of jobs that will be done by contractors and what, if any, the contractor obligations to employees will be,	8	3	3.5.3.2, 3.5.3.3	Section 3.5.3.3 includes a discussion of employment opportunities. Business opportunities, including procurement practices, as described in Section 3.5.3.2 and the Business Development Plan (Volume 10, Chapter 24).	3-54 to 3-69
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		xiii. Employee housing, including number of employees expected to be residing onsite or in workers’ camp(s), on-site services and facilities for workers, transportation to/from work and proposed work schedule,	2	5	5.6	-	5-2
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		xiv. A discussion of the commuting arrangements for locally hired employees, and how the Proponent plans to support the fly-in/fly-out workforce with in-community liaison workers,	10	28	7.1.4	Section 7.1.4 of the Human Resources Plan describes the work rotation schedule and commuting arrangements. Specific use of in-community liaison workers has yet to be determined.	28-9
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		xv. An outline the scope, progress, and potential success of the development of an Inuit Impact and Benefit Agreement (IIBA) with the Kitikmeot Inuit Association. Discussion of potential IIBA negotiations should consider all potentially impacted communities within the RSA,	2	5	5.8	-	5-3
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		xvi. For issues within the IIBA that are not made public, the Proponent should outline how they will facilitate cooperation while maintaining any confidentiality, and	2 3	5 1	5.8, 5.9 1.5.3.3	-	5-3 to 5-4 1-27 to 1-32
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		xvii. Any issues related to compensation required as a result of the Project.	2	5	5.9	-	5-3 to 5-4
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		While some details relating to tax estimates and corporate profits are highly sensitive and it is recognized that certain information may be confidential and not be publicly available, the Proponent is encouraged to engage with the GN in order to share what information it can as it relates to the mechanics behind its corporate tax estimates (e.g. forecasts of commodity prices, assumptions regarding profits, etc.). The NIRB requests that information which may be available in other areas of the EIS be clarified as to the Proponent’s estimation of any related tax impacts for clarity and ease of analysis.				Royalties and direct corporate taxes paid by the project are not provided. These may be provided in the FEIS.	
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		With respect to overall operating environment, many governance structures or other social components relating to community and territorial leadership can come to bear upon an operator such as Sabina. It is important to understand the Project in terms of the environment in which it operates. The Proponent shall therefore provide the following as it relates to governance and leadership in terms of the Project development:	2	5	5.9	-	5-3 to 5-4
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		i. A description of the current social and governmental regimes in the Project region, structure and functions of the governments, Inuit organizations, other co-management organizations and interactions among those organizations,	8	3	Appendix V8-3A	Appendix V8-3A: 2012 Socio-economic and Land Use Baseline Report, Sections 3.3.1, 3.3.2, and 3.3.3.	Appendix V8-3A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		ii. A discussion of how potential conflict of interest will be managed in current governance regime during Project development,	2	5	5.9	-	5-3 to 5-4
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		iii. A discussion of how Project planning meets the needs of regional economic development plans (community wellness initiatives, Hamlet programs, housing etc.), where applicable, and which are managed by Federal and territorial governments agencies and Inuit organizations,	8	3	Appendix V8-3A	Baseline information is detailed in Appendix V8-3A. Section 7.5.3 describes wellness programs and other hamlet programs; Section 7.5.5 discusses housing and other programs and initiatives related to community well-being. Governance, including development plans and initiatives, are described in Section 3.3.	Appendix V8-3A

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		iv. A description of the Proponent’s understanding on the roles that governments play in the process of the Project development, and associated requirements and obligations for proponents by policies and regulations,	8	3	Appendix V8-3A	Baseline information is detailed in Appendix V8-3A. Section 3.3 describes organizations under NTI and provides descriptions of NIRB, NPC, NSRT, NWB, and NWMB, and also reviews the structure and function of the GN and hamlets.	Appendix V8-3A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		v. A description of the roles of the various parties in socio-economic monitoring programs and the Kitikmeot Socio-Economic Monitoring Committee, and a description of how the Proponent anticipates contributing to this framework,	10	23	4	-	3
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		vi. A discussion of efforts to be made by the Proponent within existing regulatory framework and government initiatives, in terms of education and skill training, community facility development, and other initiatives planned by the Proponent, and	10	28	7.3	-	13 to 16
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.5 ECONOMIC AND OPERATING ENVIRONMENT		vii. Other social and economic responsibilities of governments in the Project impacted regions.	2	5	5.9	-	5-3 to 5-4
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION		The Proponent shall describe the Project components and all activities associated with each component in a systematic way. This description shall encompass all phases of development in sufficient detail to allow the Proponent to predict potential adverse environmental effects and address public concerns about the Project, from site preparation through to construction, operations, maintenance, any potential modifications and/or expansions that may be required during the operations phase based on exploration results, temporary closure, final closure, and post closure activities.	2	All	All	-	All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION		The description must include an approximate timeline for each Project component and all activities associated with each component, where applicable.	2	2	2.3.1, 6.8, 6.9, 6.6.13.5, 7.2.4, 8.1, 8.14.3 3.2.5, 3.3, 4.2	-	2-8, 6-35, 6-45, 6-46, 7-16, 8-1, 8-9
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION		The description shall also include changes that may occur in the vicinity as a consequence of the Project.	2 10	2 8	2.1 3	-	2-1 to 2-5 8-2 to 8-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION		Where specific codes of practice, guidelines, and/or policies may apply to items to be addressed, and particularly where these may involve thresholds and quantitative limits to be applied, those documents must be cited and may be included as appendices to the EIS.	2 10	All All	All All	-	All All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION		For greater clarity, the detailed description of Project components and activities, where appropriate, shall cross-reference the impact assessment, environmental management and overall development plan sections of the EIS.	2	2	2.1	-	2-1 to 2-5
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1 Mine Sites on Goose Property and George Property		2	6	All	-	All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.1 Geology/Mineralogy of the Ore Deposit	The Proponent shall describe the ore resources at each of the proposed mine sites, including where appropriate:	2	7	7.1	-	7-1 to 7-11
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.1 Geology/Mineralogy of the Ore Deposit	i. Deposit locations, including detailed maps of the mine site areas using latitude and longitude coordinates,	2	7	7.1	-	7-1 to 7-11
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.1 Geology/Mineralogy of the Ore Deposit	ii. Detailed structural geology maps,	2	7	7.1	-	7-1 to 7-11
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.1 Geology/Mineralogy of the Ore Deposit	iii. The bedrock lithology and mineralogy in the Project area,	2	7	7.1	-	7-1 to 7-11
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.1 Geology/Mineralogy of the Ore Deposit	iv. A description of the overburden including texture/grain size, moisture/ice content, and occurrence of ice lenses and implications for the Project,	2	6, 7	6.6.4, 6.6.13.3, 7.1.3, 7.14, 7.1.5	-	6-20, 6-33, 7-8 to 7-11
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.1 Geology/Mineralogy of the Ore Deposit	v. Fractures and their implications to the Project,	2	7	7.1.2.2, 7.1.3, 7.1.5	-	7-6, 7-8, 7-11
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.1 Geology/Mineralogy of the Ore Deposit	vi. Types of the deposits and associated bedrocks,	2 5	2 1	2.1 1.1.1, 1.1.2	-	2-1 to 2-5 1-1 to 1-3, 1-4 to 1-10
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.1 Geology/Mineralogy of the Ore Deposit	vii. Average and range of ore grades estimated for the deposits,	2	7	7.1.2, 7.2.3, 7.2.8.1	-	7-3 to 7-7, 7-15, 7-28
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.1 Geology/Mineralogy of the Ore Deposit	viii. The nature, depth, and thickness of the ore deposits to be mined,	2	7	7.1.2	-	7-3 to 7-7
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.1 Geology/Mineralogy of the Ore Deposit	ix. The mineralogy and geochemistry of ore and waste rock including acid rock drainage (ARD) and metal leaching (ML) potential as well as the acid neutralizing potential, and	2 5	2, 7 2	2.1, 7.2.7.5, 7.2.8.3 2.4	-	2-1 to 2-5, 7-28, 7-29 2-28
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.1 Geology/Mineralogy of the Ore Deposit	x. Ore body delineation.	2	7	7.1.2	-	7-3 to 7-7
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	The Proponent shall describe the ore mining, transportation and processing associated with the Project, using maps and diagrams whenever applicable, including the following details:	2	4, 7	4.2.5, 7.2, 7.9	-	4-8, 7-13 to 7-38

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	i. A mining plan indicating the sequence of development for the proposed open pits and underground mines at Goose and George properties,	2	7	7.2.3	-	7-15 to 7-17
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	ii. A description of the open pits and underground mine design, mining methods, operation, and processing including site layout, mine water management, anticipated production rate, designed production capacity, production schedule, equipment selection, energy consumption and energy efficiency measures,	2	4, 7	4.3.3, 7.2, 7.3, 7.4, 7.5, 7.6, 7.6	-	4-18 to 4-19, 7-13 to 7-32
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	iii. Provision and description of flow sheets depicting ore processing, material flow and waste stream, energy consumption and water consumption,	2	7	7.8	-	7-32 to 7-37
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	iv. A description of the hydrogeological conditions (i.e. permeability of geological formations, hydraulic head and groundwater flow direction,) of the open pits and the underground mines, including estimates of the variance in permeability and groundwater flow, and implications of geological anomalies such as fault zones, weak rock formations or areas of higher than expected groundwater flow on the design of the open pits and underground mining facilities and implications of hydrological conditions on nearby surface waters,	2	7	7.1.3, 7.1.4, 7.2.4.3, 7.2.4.4, 7.2.5.4, 7.2.6	-	7-8, 7-9, 7-19, 7-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	v. A discussion on how permafrost conditions (seasonal thawing, taliks, degradation due to mining disturbances) were considered in the design of the open pits and underground mining facilities,	2	7	7.2.4, 7.2.5	-	7-17 to 7-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	vi. A stability analysis of the pit slopes and underground mine works and provision of adequate ground control measures where necessary,	2	7	7.2.4, 7.2.5	-	7-17 to 7-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	vii. Design of the impoundment/retention structures and measures for run-off and seepage control,	2	7	7.2.4.4, 7.2.8.4	-	7-19, 7-29
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	viii. Design of the mine ventilation for the underground mine,	2	7	7.2.5.3	-	7-21
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	ix. Daily and yearly average extraction rate(s) and quantities of ore and waste rock produced,	2	7	7.2.3	-	7-16
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	x. Cut-off grades in grams per tonne for precious metals (i.e. gold and silver) and in percent for any base metals (i.e. copper), for ore and low grade material that could be processed at some point in the future, based on current economic conditions or reasoned projections,	2	7	7.2.3.1	-	7-15
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	xi. The means of drilling, blasting, extraction, loading and transport of ore,	2	7	7.2.4.1, 7.2.5.1	-	7-17, 7-20
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	xii. Design, location and capacity of run-of the mine stockpile, if any, and ore stockpile facilities,	2 10	7 8	7.2.8.1, 7.2.8.2 3	-	7-28 8-2 to 8-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	xiii. Dust suppression technologies and dust suppressants to be used in mining, loading, transportation, storage, crushing and other processes where dust might be generated,	2	7	7.2.8.2	-	7-28
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	xiv. A review of similar operations elsewhere in similar settings, with a discussion of the results of research on the long-term stability of the underlying permafrost and frozen materials, as well as the implications to Project planning and design,	2	7	7.2.1	-	7-13
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	xv. Measures and plans to control natural hazards and/or mitigate their impacts on the Project, such as rock falls and collapses, extreme climate events, and other geological or geomorphological events (e.g., storm, flooding, and earthquake),	2	7	7.2.2, 7.2.4.1, 7.2.4.2, 7.2.5.1, 7.2.5.2	-	7-14, 7-17, 7-18, 7-20, 7-21
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	xvi. Provision of a comprehensive description of the proposed mill design, including: facilities and structures include plant layout plans, mill process and operations for ore processing, reagents used, water management strategies (including methods to maximize water re-use, minimize takings of natural waters and energy consumption), and	2	7	7.8, 7.9, 7.10	-	7-32 to 7-47
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.2 Mining, Transport and Processing	xvii. A discussion of proposed options for transporting the final gold product off site.	2	7	7.8.10	-	7-37
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.3 Ore Stockpile Facilities	The Proponent shall, in connection with its Ore Storage Management Plan (Subsection 9.4.5), present details on the ore stockpile facilities associated with the Project, using maps and diagrams whenever applicable, and include the following:	2 10	7 8	7.2.8.1, 7.2.8.2 3	-	7-28 8-2 to 8-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.3 Ore Stockpile Facilities	i. Anticipated quantities and grade of ore extracted, including daily and yearly average extraction rates,	2	7	Table 7.2.1	-	7-16
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.3 Ore Stockpile Facilities	ii. A description of the ore grade handling, including the design, locations and capacities of the stockpile site(s). The Proponent shall include references to similar operations in comparable conditions, applicable modelling information, and the results of research on the short and long-term thermal stability of the underlying permafrost and frozen materials,	2	7	7.2.1, 7.2.8	-	7-13, 7-28 to 7-29
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.3 Ore Stockpile Facilities	iii. A description of the physical and chemical stability of the ore material to be stored, with regard to the long-term ARD and ML potential of the ore material. Consideration should be given to the latest monitoring results from mines in the same general climatic conditions,	2	7	7.2.1, 7.2.8	-	7-13, 7-28 to 7-29

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.3 Ore Stockpile Facilities	iv. Explanation of the relationship between the timing of ARD/ML and permafrost encapsulation in cold weather conditions, with consideration for potential climate change, and	2	7	7.2.1, 7.2.8	-	7-13, 7-28 to 7-29
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.3 Ore Stockpile Facilities	v. A description of run-off and seepage prevention/control structures.	2	7	7.2.8.4	-	7-29
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.4 Water Supply and Water Treatment Facilities	The Proponent shall present the details on all water supply and water treatment facilities associated with the Project, including the facilities at the mine site(s), Marine Laydown Area including tank farm(s) and laydown area(s). The Proponent should include the following:	2 10	6, 7, 8 7	6.4.11, 6.4.12, 6.6.1, 6.7.3, 7.8.8, 7.10, 8.11 3.2 , 3.3, 3.4	-	6-11, 6-12 to 6-17, 6-39, 7-36, 7-39 to 7-47, 8-6 to 8-7 7-9 to 7-14
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.4 Water Supply and Water Treatment Facilities	i. 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, including the frequency and timing of withdrawals,	2 10	6, 7, 8 7	6.4.11, 6.4.12, 6.6.1, 6.7.3, 7.8.8, 7.10, 8.11 3.2	-	6-11, 6-12 to 6-17, 6-39, 7-36, 7-39 to 7-47, 8-6 to 8-7 7-4 to 7-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.4 Water Supply and Water Treatment Facilities	ii. A description of water uses and volumes including those for camp sites, open pit and underground mines, dock facility, mill processing facility, dust suppression, firefighting reserves, workshops and maintenance facilities as well as drilling activities, etc.,	2 10	6, 7, 8 7	6.4.11, 6.4.12, 6.6.1, 6.7.3, 7.8.8, 7.10, 8.11 3.2	-	6-11, 6-12 to 6-17, 6-39, 7-36, 7-39 to 7-47, 8-6 to 8-7 7-4 to 7-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.4 Water Supply and Water Treatment Facilities	iii. A description of water treatment process methods for all fresh water use (i.e. mill processing and domestic water), including the design of the facility(ies),	2 10	6, 7, 8 7	6.4.11, 6.4.12, 6.6.1, 6.7.3, 7.8.8, 7.10, 8.11 3.3, 3.4, 3.5, 3.6, 3.7	This will be addressed in detailed design, FEIS	6-11, 6-12 to 6-17, 6-39, 7-36, 7-39 to 7-47, 8-6 to 8-7 7-9 to 7-35
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.4 Water Supply and Water Treatment Facilities	iv. Design features to prevent the impingement or entrapment of fish at water intakes,	NA	NA	NA	This will be addressed in detailed design, FEIS	NA
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.4 Water Supply and Water Treatment Facilities	v. A plan for ensuring mine operations and safety during times of low water availability (winter, and in years of exceptionally low precipitation),	2	7	7.10.2.2, 7.10.3.1	-	7-41, 7-44
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.4 Water Supply and Water Treatment Facilities	vi. A description of the facilities for washing mine trucks and other equipment, as well as any treatment of water to be used for such activities, and	2	6	6.7.1.5	-	6-38
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.4 Water Supply and Water Treatment Facilities	vii. A description of plans to recycle or re-use water resources.	2	9	9.2.2	-	9-4
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.5 Natural Drainage Diversion	The Proponent shall present, in connection with its Site Water Management Plan (Subsection 9.4.4), the details on any required alteration of drainage patterns and diversions, including:	2	7	7.10.2.3, 7.10.3.1, 7.10.3.2	-	7-41, 7-44, 7-46
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.5 Natural Drainage Diversion	i. A description of any planned alteration of drainage patterns and/or diversions of natural drainage from mine site and Project facilities, and estimation of the flows to be diverted,	2	7	7.10.2.3, 7.10.3.1, 7.10.3.2	-	7-41, 7-44, 7-46
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.5 Natural Drainage Diversion	ii. A discussion of measures to prevent or mitigate sedimentation within these diverted flows,	-	-	-	This will be addressed in detailed design, FEIS	N/A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.5 Natural Drainage Diversion	iii. A discussion of potential challenges anticipated in constructing drainage diversions including seasonal effects (e.g. melting ice lenses),	-	-	-	This will be addressed in detailed design, FEIS	N/A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.5 Natural Drainage Diversion	iv. A discussion of the potential for mobilizing sediments, generating erosion and disturbances to terrain/landforms, and	-	-	-	This will be addressed in detailed design, FEIS	N/A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.5 Natural Drainage Diversion	v. A discussion of potential environmental impacts caused by altered drainage patterns, including the extent and location of areas to be flooded seasonally as well as plans for maintaining drainage systems during seasonal extreme conditions such as spring freshet.	-	-	-	This will be addressed in detailed design, FEIS	N/A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.6 Mine De-Watering	The Proponent shall present, in connection with its Site Water Management Plan (Subsection 9.4.4), details on mine de-watering required for the Project, including the following:	2	7	7.2.4.3, 7.2.4.4, 7.2.5.4	-	7-19, 7-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.6 Mine De-Watering	i. A description of proposed de-watering methods and design of the mine water handling system for the open pits and underground mine including a discussion of the potential uses for the mine water,	2	7	7.2.4.3, 7.2.4.4, 7.2.5.4	-	7-19, 7-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.6 Mine De-Watering	ii. A description of proposed de-watering methods including a discussion of the potential uses for the water and disposal method(s) should there be a need to dispose of any water resulting from de-watering,	2	7	7.2.4.3, 7.2.4.4, 7.2.5.4	-	7-19, 7-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.6 Mine De-Watering	iii. A description of proposed geotechnical works, the areas that may be affected, the quantities of bottom sediment requiring disposal, and the proposed disposal methods,	2	7	7.2.4.4	-	7-19
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.6 Mine De-Watering	iv. Estimates of average mine water volumes, methods used to calculate volumes, and discussion of potential uses for mine water,	-	-	-	This will be addressed in detailed design, FEIS	N/A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.6 Mine De-Watering	v. A prediction of the maximum inflow into the open pits and the underground mine during mining, including estimates of variance and likelihood of estimates. The pumping capacity should be designed by taking into consideration the predicted maximum inflow. Measurements for controlling any necessary inflow should be discussed, in addition to describing the groundwater monitoring program, and	-	-	-	This will be addressed in detailed design, FEIS	N/A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.1.6 Mine De-Watering	vi. Anticipated salinity and general characterization of water from each pit and underground mine, including estimates of the variance of water quality.	-	-	-	This will be addressed in detailed design, FEIS	N/A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	The Proponent shall provide the following information regarding Project components and activities for the proposed establishment of the Marine Laydown Area at Bathurst Inlet, tank farms and storage facilities, with site maps, diagrams, and general arrangement drawings provided for reference purposes where deemed useful, specifically addressing:	2	6	6.4	-	6-6 to 6-12

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	i. A discussion of how the precautionary approach has been incorporated into the design of storage facilities and the proposed Marine Laydown Area, 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),	2 10	2 1	2.1.4 4	-	2-2 to 2-3 1-2 to 1-5
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	ii. A discussion of the study results related to bathymetry, rock and sediment geotechnical properties, and sediment thickness and sub-sea permafrost depth and thickness and quality for the proposed dock site (if required),	2	4, 6	4.3.2.3, 6.4.4	-	4-17, 6-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	iii. A description of any transfer sites of materials from ships to barges,	2	4, 6	4.3.2.3, 6.3.3.2	-	4-17, 6-5
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	iv. A description of all facilities proposed to be constructed at the storage facility, including discussion on the wharf storage facility, administration facility, land-based or water- based navigational aids, etc. (where applicable),	2	6	6.3.3.3, 6.4	-	6-5, 6-6 to 6-7
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	v. A discussion of all potential uses of the port site and storage facilities, including predicted non-project and/or private uses,	2	6	6.4	-	6-7
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	vi. A description of all facilities associated with the transfer and handling of fuel and any hazardous products,	2	6	6.4.6	-	6-10
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	vii. A description of the types and anticipated volumes/quantities of materials and equipment to be transported to and from the port, including hazardous /dangerous goods cargo,	2	6	6.4.3, 6.4.5.6	-	6-7 to 6-9
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	viii. A description of spill contingency plans for the port and tank farm/storage facility,	2	6	6.4.7, 6.5.4	-	6-10 to 6-11, 6-13
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	ix. A description of the communication system and power generation unit to be employed,	2	6	6.4.9, 6.6.10	-	6-11, 6-26
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	x. A discussion of plans for storage facility security management, and	2	6	6.4.10	-	6-11
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.2 Mine Site Tank Farms, Marine Laydown Area and Storage Facilities	xi. Discussion of the reclamation and closure of the facilities upon completion of the project.	2	8	8.12, 8.13, 8.14	-	8-8 to 8-10
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3 Waste Management Facilities	The Proponent shall describe the sources, types and quantities of waste predicted to be generated by the Project, and the on-site processes for the collection, handling and disposing of wastes generated by the Project including any off-site disposals. The Proponent shall include the following with cross referencing to applicable management plans (Section 9.4) where appropriate:	2 10	6, 7 9, 10, 11, 12	All All	-	All All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.1 Waste Rock Facilities	i. An inventory of waste rock generated during construction and operation of the Project including overburden, waste rock, low grade mineralized material, processing wastes, excavated material, and any other related wastes if applicable,	2 10	7 9	7.13 3	-	7-49 to 7-53 9-2 to 9-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.1 Waste Rock Facilities	ii. A description of overburden and waste rock handling, including the design, locations and capacities of the stockpiles sites, describing the options for each type of waste rock. The Proponent shall include references to similar operations in comparable conditions, applicable modelling information (i.e. general climatic conditions and climate trends and their consideration in the design of the facility), and the results of research on the long- term thermal stability of the underlying permafrost and frozen materials,	2 10	4,7 8, 9	4.2.5, 7.2.1, 7.2.7 3, 3	Long- term thermal stability of the underlying permafrost and frozen materials testing will be addressed in FEIS	4-8 to 4-10, 7-13, 7-24 to 7-28 8-2 to 8-8, 9-2 to 9-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.1 Waste Rock Facilities	iii. A description of the physical and chemical stability of the types of materials to be stored and those to be used for containment construction, with regard to the short and long-term ARD and ML potential of the waste rock. Consideration should be given to the latest monitoring results from mines in the same general climatic conditions,	2 10	7 22	7.2.6 6	-	7-22 to 7-27 22-4 to 22-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.1 Waste Rock Facilities	iv. Details regarding the ARD and ML characterization of waste rock, the method of testing in terms of both static and kinetic tests, the number of samples and sampling protocols, the company and personnel to carry out the tests, and implications to possible use and disposal,	2 10	7 22	7.2.6 6	-	7-22 to 7-27 22-4 to 22-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.1 Waste Rock Facilities	v. A description, in qualitative and quantitative terms of the chemistry of frozen groundwater from joints and fractures in the waste rock disposal area,	N/A	N/A	N/A	This will be addressed in detailed design, FEIS	N/A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.1 Waste Rock Facilities	vi. An explanation of the relationship between the timing of ARD and ML and permafrost encapsulation in cold weather conditions, with consideration for potential climate change, and	2	2	2.1.2, 4.2.5.2, 7.2.2, 7.2.6 to 7.2.7.2, 8-1, 8-5	-	2-1, 4-9, 7-14, 7-23 to 7-27, 8-1, 8-4

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.1 Waste Rock Facilities	vii. An estimation of the quantities of potential acid generating (PAG) and non-PAG materials that will be generated and details of the methodology used in classifying PAG and non- PAG.	2 10	7 22	7.2.6 to 7.2.7 6	-	7-22 to 7-27 22-4 to 22-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.2 Tailings Management Facilities	i. A description of the tailings management facilities design,	2 11	6 4	6.6.13 Appendix V11-4C	Appendix V11-4C Waste and Water Management, Section 3	6-28 Appendix V11-4C
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.2 Tailings Management Facilities	ii. A description of how geotechnical factors, geological characteristics (weak rock formations, fault zones and their hydrogeological characteristics), and permafrost conditions (seasonal thawing, taliks, degradation due to tailings disposal, and long-term evolution) were considered in the design of the tailings management facility(ies),	2 10 11	6 9 4	6.6.13 3.2.5 Appendix V11-4C	Appendix V11-4C Waste and Water Management, Section 3. Further geotechnical information to be provided in FEIS	6-28 9-13 to 9-14 Appendix V11-4C
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.2 Tailings Management Facilities	iii. A description of how the general climate conditions including climate trends were considered in the design of the tailings management facilities (e.g., prevention of ice formation),	2 9 11	6 2 4	6.6.13 2.2, 2.16 Appendix V11-4C	Appendix V11-4C Waste and Water Management, Appendix A	6-28 2-1, 2-21 Appendix V11-4C
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.2 Tailings Management Facilities	iv. A description of the proposed process and operations of the tailings management facilities during both operations and post-closure. The Proponent shall include a contingency plan in the event that discharges from the containment area do not meet licensing criteria,	2 10	7 7, 9, 29	7.8.5, 7.9 3.6, 3.7, 4.6, 5	-	7-35, 7-37 to 7-39 7-17 to 7-34, 9-9 to 9-16, 9-19, 29-24, 29-34 to 29-37
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.2 Tailings Management Facilities	v. A description of seepage and run-off prevention and control structures and designs, and	2 10	7 9, 29	7.8.5, 7.9 3, 7, 4, 6, 5	-	7-35, 7-37 to 7-39 9-9 to 9-16, 9-19, 29-24, 29-34 to 29-37
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.2 Tailings Management Facilities	vi. A description of the tailings chemistry, physical properties (rheology, solid content, consolidation density, slurry temperature, volume estimates), mineralogical characteristics and long and short-term ARD and ML potential.	2 11	7 4	7.9.1.4 Appendices V11-4A, V11-4C, V11-4D	Appendix V11-4A, Geochemical Characterization Report, Appendix V11-4C Waste and Water Management Report; Appendix V11-4D Water Quality Prediction Report	7-38 Appendices V11-4A, V11-4C, V11-4D
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.3 Waste Water Treatment Facilities	i. A description of the water treatment process for all major sources of water from the Project, including process effluent, open pit water, underground mine water, site, waste facilities and stockpile drainage/runoff, and sewage/grey waste water,	2 10	4 7	4.3.3.3, 6.4.13, 6.6, 6.7, 8.11 3.0	-	4-19 to 4-20, 6-11, 6-16 to 6-18, 6-23, 6-37 to 6-43, 8-6 to 8-7 7-3 to 7-35
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.3 Waste Water Treatment Facilities	ii. A description of proposed mine water (i.e. process effluent, open pit water, underground mine water, site and stockpile drainage/runoff) treatment facility to be used, to include amount of treatment sludge production and its management/storage,	2 10	6 9	6.6.13 3.2	-	6-27 to 6-29 9-5
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.3 Waste Water Treatment Facilities	iii. A discussion related to the treated effluent discharge methods, including the design of the facility, identification of discharge points, the anticipated water quality and quantities to be disposed of, and conservation and recycling methods. Specific mention should be given to modifications that may be related to operating in arctic conditions. Include associated implications for regulatory compliance,	2	6	6.4.13, 6.6.8.1, 6.7.1.4, 6.7.9.1	-	6-11, 6-23, 6-38, 6-43
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.3 Waste Water Treatment Facilities	iv. A description of proposed sewage/grey water treatment facilities to be used, including a discussion of the technology to be employed, the design and locations of the facilities, point(s) of discharge, solids (sludge) disposal methods, and the quality and quantities to be disposed of, as well as the applicable discharge standards,	2	6	6.4.13, 6.6.8.1, 6.7.1.4, 6.7.9.1	-	6-11, 6-23, 6-38, 6-43
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.3 Waste Water Treatment Facilities	v. Contingency measures for the disposal of effluent and sewage/grey water during periods of facility malfunction and/or disturbances, with details regarding the associated disposal and treatment technologies and facilities,	2	6	6.4.13, 6.6.8.1, 6.7.1.4, 6.7.9.1	-	6-11, 6-23, 6-38, 6-43
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.3 Waste Water Treatment Facilities	vi. A description of the receiving environment including the spatial extent and magnitude of alteration of the receiving waters, how the Proponent will ensure non-toxicity, the spatial extent of the mixing zone and modelling predictions for concentrations of all parameters of concern, including the equations and assumptions on which the modeling predictions were based, at key points between the discharge point and return to baseline water quality conditions, and	2	6	6.4.13, 6.6.8.1, 6.7.1.4, 6.7.9.1	-	6-11, 6-23, 6-38, 6-43
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.3 Waste Water Treatment Facilities	vii. A description of the on-site processes for the collection, handling and disposing of contaminated water wastes (including melt water) to be generated by the Project.	2	6	6.4.13, 6.6.8.1, 6.7.1.4, 6.7.9.1	-	6-11, 6-23, 6-38, 6-43
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.4 Landfill Facilities	i. Research results for effectiveness of similar landfill operation facilities in comparable geological regions and climate condition,	10	10	7.2.2	Research results to be provided with the FEIS	10-17
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.4 Landfill Facilities	ii. Locations of any landfill facilities, with estimates of containment capacities, associated design criteria and considerations to minimize impact on the surrounding environment. Include engineering features and facility layout drawings in relation to nearby roads, watercourses and waterbodies,	2 10	6 10	6.6, 6.6.8.4, 6.7 7.0	Estimates and layouts not available in DEIS will be provided with the FEIS	6-16, 6-25, 6-37 10-16 to 10-17
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.4 Landfill Facilities	iii. An inventory of the types and volumes of non-combustible, non-hazardous industrial wastes to be generated and landfilled over the life of the Project,	2 10	6 6	6.6.8, 6.7.9 6.1	Final volumes not available in DEIS - will be provided with the FEIS	6-23, 6-43 to 6-44 6-6 to 6-9
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.4 Landfill Facilities	iv. An inventory of the types and volumes of hydrocarbon contaminated wastes to be generated and sent south over the life of the Project,	2 10	6 12	6.6 6.2	Final volumes not available in DEIS - will be provided with the FEIS	6-16 12-11
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.4 Landfill Facilities	v. A description of the proposed collection, handling, storage, treatment, and/or disposal methods of contaminated ice, snow, soil, seepage and/or surface runoff, and	2 10	6 6	6.4.14, 6.6, 6.6.8.2, 6.6.8.5, 6.7.9 6.12	-	6-13, 6-16, 6-25, 6-43 6-7
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.4 Landfill Facilities	vi. A description of any proposed use of municipal waste facilities or other treatment options for hydrocarbon, organic wastes.	10	10, 12	7, 2	-	10-16, 12-3
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.5 Hazardous Waste	i. An inventory of the types and predicted volumes/quantities of hazardous wastes to be generated or produced by the Project activities, including shipping operations,	10	11,12	6.5.2, 6.2, 7.3	Final volumes not available in DEIS - will be provided with the FEIS	11-6, 12-11, 12-16

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.5 Hazardous Waste	ii. A description of proposed storage, transport, handling and disposal methods to be employed for hazardous waste generated,	2	6, 7, 8, 9	6.6.7, 6.6.8.6, 6.7.8, 6.7.9.6, 7.7, 8.12, 9.2.6	-	6-23, 6-26, 6-42, 6-45, 7-32, 8-8, 9-5
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.5 Hazardous Waste	iii. A description of measures to minimize use of hazardous materials and to reduce generation of hazardous waste,	2 10	6, 7, 8, 9 12	6.6.7, 6.6.8.6, 6.7.8, 6.7.9.6, 7.7, 8.12, 9.2.6 2	-	6-23, 6-26, 6-42, 6-45, 7-32, 8-8, 9-5 12-3
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.5 Hazardous Waste	iv. Details regarding the destinations for each type of hazardous waste, including the disposal of containers used to transport or store hazardous materials, and	2 10	6, 7, 8, 9 12	6.6.7, 6.6.8.6, 6.7.8, 6.7.9.6, 7.7, 8.12, 9.2.6 7.3	-	6-23, 6-26, 6-42, 6-45, 7-32, 8-8, 9-5 12-12 to 12-19
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.5 Hazardous Waste	v. A description of training for employees tasked with the handling of hazardous waste materials.	2 10	6, 7, 8, 9 12	6.6.7, 6.6.8.6, 6.7.8, 6.7.9.6, 7.7, 8.12, 9.2.6 6.3	-	6-23, 6-26, 6-42, 6-45, 7-32, 8-8, 9-5 6-11
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.6 Camp Waste	i. A description of the facilities, technologies and equipment to be used for incineration of domestic waste,	2 10	6 11	6.6.8.2, 6.6.8.3, 6.7.9.2, 6.7.9.3 1	To be provided with the FEIS	6-24, 6-25, 6-44 11-1
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.6 Camp Waste	ii. An inventory of domestic waste to be incinerated, including both land-based and ship-based generated wastes,	10	11	6.5	To be provided with the FEIS	11-5 to 11-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.6 Camp Waste	iii. A description of the methods for disposal of incineration ash, and	2 10	6 11	6.6.8.2, 6.6.8.3, 6.7.9.2, 6.7.9.3 7.5	-	6-24, 6-25, 6-44 11-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.3.6 Camp Waste	iv. A description of wildlife deterrent programs that may be implemented to reduce depredation and prevent access to food sources by predators such as bears and wolverines.	2 10	2 10	2.1.6 6.1.1, Appendix A	Appendix A	2-4 10-6, Appendix A
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	The Proponent shall describe all ground transportation options, including all-weather and winter roads (including various access roads, mine haul roads, site service roads, in-pit haul roads, roads used to facilitate maintenance of infrastructure and facilities, etc.).	2 10	4, 6, 7 14	4.2.2.3, 4.2.3, 6.5, 6.6.2, 6.7.2, 7.2.8.2 1	-	4-5, 4-7, 6-12 to 6-15, 6-17 to 6-19, 6-39, 7-28 14-1
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	The EIS shall describe and discuss the following in connection with the Roads Management Plan (Subsection 9.4.10), including relevant maps and drawings where useful as such pertain to roads as proposed within the scope of the Project:	2 10	6, 7 14	6.5, 6.6.2, 6.7.2, 7.2.8.2 All	-	6-12 to 6-15, 6-17 to 6-19, 6-39, 7-28 All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	i. Design specification and features of all roads, including construction methods and schedule, laydown areas, temporary works and construction camps, estimates, sources, and types of materials required for construction and maintenance, water crossings and diversions of watercourses,	2 10	6, 7 14	6.5, 6.6.2, 6.7.2, 7.2.8.2 4	-	6-12 to 6-15, 6-17 to 6-19, 6-39, 7-28 14-10 to 14-14
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	ii. How all aspects of proposed roads including components such as bridges and culverts, will be managed and maintained for the life of the Project,	2 10	6, 7 14	6.5, 6.6.2, 6.7.2, 7.2.8.2 8	-	6-12 to 6-15, 6-17 to 6-19, 6-39, 7-28 14-18 to 14-22
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	iii. Plans to address additional traffic on any separately constructed road network that may require consideration, should the development of the Back River Project be granted pursuant to NLCA Section 12.5.12,	2	6	6.5	Not considering separately constructed road network.	6-12
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	iv. Description of any infilling of lake, wetland or stream habitats associated with road construction where applicable for the Project,	2	6	6.4.3	-	6-7 to 6-8
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	v. Design features and structures planned to protect and facilitate wildlife movement (e.g. caribou crossings and migration routes) and humans that may cross Project roads during operations (including ATVs and snowmobiles), including a discussion of plans to prevent/minimize wildlife and human collision-related mortalities,	2 5	6 5	6.5, 6.6.2, 6.7.2 5.1.2.4, 5.1.2.5, 5.1.3.4, 5.1.3.5, 5.1.4.4, 5.2.1	-	6-12 to 6-15, 6-17 to 6-19, 6-39
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	vi. Design features and structures planned to protect and facilitate fish movement and migration,	2	6, 7	6.5, 6.6.2, 6.7.2, 7.2.8.2	-	6-12 to 6-15, 6-17 to 6-19, 6-39, 7-28
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	vii. Dust suppression, methods and types of dust suppressants as well as mitigation methods for sedimentation during construction and operations,	2	7	7.2.8.2	-	7-28
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	viii. How TK has been considered in the selection of the ground transportation network,	2 3	2 3	2.1.9 3.3	-	2-5 3-39 to 3-42
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	ix. The relationship of ground transportation with existing hunting and travelling routes (including those routes in close proximity or intersecting planned ground transportation roads), and	2	2, 6	2.1.9, 6.6.2.2	-	2-5, 6-19
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.4 Ground Transportation and Associated Water Crossings	x. The duration, frequency and extent of use of all Project facilities, including consideration given to public access for traditional and/or non-traditional pursuits.	2	2, 6	2.1.9 to 2.1.12, 6.5.1, 6.6.2.2, 6.7.2.2	-	2-5, 6-12, 6-19, 6-39
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	The Proponent shall describe all marine shipping associated with the Project, in connection with the Shipping Management Plan (Subsection 9.4.11), including relevant maps and drawings where useful.	2	4, 6	4.2.2.2, 4.2.4, 4.2.9.3, 4.3.1.2, 4.3.2.3, 6.3.3, 6.4, 6.5.3.3	-	4-4, 4-7, 4-13, 4-14, 4-17, 6-4 to 6-6, 6-6 to 6-12, 6-13

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	The description of marine infrastructure and shipping must include the following:	2	4, 6	4.2.2.2, 4.2.4, 4.2.9.3, 4.3.1.2, 4.3.2.3, 6.3.3, 6.4, 6.5.3.3	-	4-4, 4-7, 4-13, 4-14, 4-17, 6-4 to 6-6, 6-6 to 6-12, 6-13
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	i. A description of the proposed marine shipping vessels (types, sizes, draft, and numbers of vessels to be used, and the vessel's intended purpose), including any accommodations barges to be utilized, 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 route(s) in terms of the marine traffic network of the region,	2 10	4, 6 15	4.2.2.2, 4.2.4, 4.2.9.3, 4.3.1.2, 4.3.2.3, 6.3.3, 6.4, 6.5.3.3 4	-	4-4, 4-7, 4-13, 4-14, 4-17, 6-4 to 6-6, 6-6 to 6-12, 6-13 15-5 to 15-7
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	ii. A clear description and an analysis of the proposed shipping route(s), including route characteristics and navigability, corresponding maps and details regarding bathymetry, navigational aids, other marine traffic using these routes, channel and berthing manoeuvres, anchorage components, etc.,	2 10	4, 6 15	4.2.2.2, 4.2.4, 4.2.9.3, 4.3.1.2, 4.3.2.3, 6.3.3, 6.4, 6.5.3.3 1.2	-	4-4, 4-7, 4-13, 4-14, 4-17, 6-4 to 6-6, 6-6 to 6-12, 6-13 15-2 to 15-4
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	iii. A description of the transit time and delay review of alternative marine routes,	2	4, 6	4.2.2.2, 4.2.9.3, 4.3.1.2, 4.3.2.3, 6.3.3	-	4-4, 4-13, 4-14, 4-17, 6-4 to 6-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	iv. A discussion on the potential for ice breaking during the planned shipping season (including the potential for such during break-up in the spring season and during freeze- up in the fall season),	2 10	4, 6 15	4.2.2.2, 4.2.4, 4.2.9.3, 4.3.1.2, 4.3.2.3, 6.3.3, 6.4, 6.5.3.3 1	-	4-4, 4-7, 4-13, 4-14, 4-17, 6-4 to 6-6, 6-6 to 6-12, 6-13 15-1
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	v. A description of any plans to overwinter fuel and discuss measures to ensure compliance with the requirements of the Canada Shipping Act, 2001, Arctic Waters Pollution Prevention Act, any associated regulations or relevant guidelines,	2 10	4, 6 15	4.2.2.2, 4.2.4, 4.2.9.3, 4.3.1.2, 4.3.2.3, 6.3.3, 6.4, 6.5.3.3 4	-	4-4, 4-7, 4-13, 4-14, 4-17, 6-4 to 6-6, 6-6 to 6-12, 6-13 15-5
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	vi. Details on the relationship of marine shipping routes and seasons with existing hunting and travelling routes,	NA	NA	NA	No known relationship.	NA
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	vii. A descripton of procedures for avoiding the disturbance of marine mammals, and for undertaking the monitoring of marine mammal occurrence and behaviour along shipping routes,	2 7 10	4, 6 7 20	4.2.2.2, 4.2.4, 4.3.1.2, 4.3.2.3, 6.3.3, 6.4, 6.5.3.3 7.5.2.2, 7.5.3, 7.5.8 6.3.3.5, 6.5, 7.2.8, 7.2.10, 7.3.8	-	4-4, 4-7, 4-14, 4-17, 6-4 to 6-6, 6-6 to 6-12, 6-13
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	viii. A discussion of how TK has been considered in the selection of the shipping routes, timing of shipping activities, and design of monitoring plans,	2	6	6.4.5.6	-	6-9
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	ix. A description of the results from bathymetric studies undertaken along the proposed shipping routes. Additional discussion of study results should also be included for identified areas where shallow waters and/or strong current exist, with consideration given to the size of barges/vessels, and the implications for shipping safety,	NA	NA	NA	Published charts.	NA
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	x. Identification of all parties responsible for ensuring safe shipping beyond the immediate port/docking site,	NA	NA	NA	Shipping companies TBD	NA
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	xi. Estimates of the volume of goods/supplies, dangerous goods, fuel, explosives and equipment to be transported and associated protocols with shipping these goods,	2	6	6.4.5, 6.4.6	-	6-6 to 6-10
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	xii. A description of loading and offloading procedures for material and supplies, dangerous goods, fuel, and explosives, including consideration of the anticipated use/reliance on policing services, and	2	6	6.4.5.5	-	6-9
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.5 Marine Shipping & Associated Facilities	xiii. A discussion of how shipping of project-related materials, supplies, and fuel will be handled during times that community and outpost camp resupply cargo and/or existing community use are being handled or undertaken, including any shared use of existing marine infrastructure.	NA	NA	NA	No shared use of infrastructure.	NA
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.6 Air Transportation	The Proponent shall describe all air transportation associated with the Project including the following:	2	4, 6, 8	4.2.2.1, 6.3.1, 6.4.15, 6.6.9, 6.7.10, 8.8	-	4-3, 6-3 to 6-4, 6-12, 6-26, 6-45, 8-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.6 Air Transportation	i. A description of all potential air transportation including air traffic, types of aircraft to be used, and the proposed use of municipal airports in the Kitikmeot region,	2	4, 6, 8	4.2.2.1, 6.3.1, 6.4.15, 6.6.9, 6.7.10, 8.8	-	4-3, 6-3 to 6-4, 6-12, 6-26, 6-45, 8-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.6 Air Transportation	ii. A description of all facilities and infrastructure proposed for air transportation, including construction methods and schedule, transfer and handling of any required fuel, etc.,	2	4, 6, 8	4.2.2.1, 6.3.1, 6.4.15, 6.6.9, 6.7.10, 8.8	-	4-3, 6-3 to 6-4, 6-12, 6-26, 6-45, 8-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.6 Air Transportation	iii. Estimates of the number of flights on a daily or weekly basis covering all phases of the Project, including estimated flight schedules (times and days),	2	4, 6, 8	4.2.2.1, 6.3.1, 6.4.15, 6.6.9, 6.7.10, 8.8	-	4-3, 6-3 to 6-4, 6-12, 6-26, 6-45, 8-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.6 Air Transportation	iv. The duration, frequency, and extent of use of each airport facility/airstrip/landing area,	2	4, 6, 8	4.2.2.1, 6.3.1, 6.4.15, 6.6.9, 6.7.10, 8.8	-	4-3, 6-3 to 6-4, 6-12, 6-26, 6-45, 8-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.6 Air Transportation	v. A description of the anticipated use/reliance on security and emergency services, during normal operations and emergency situations, and	2	4, 6, 8	4.2.2.1, 6.3.1, 6.4.15, 6.6.9, 6.7.10, 8.8	-	4-3, 6-3 to 6-4, 6-12, 6-26, 6-45, 8-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.6 Air Transportation	vi. Details regarding the proposed procedures for accident, malfunction and incident management and reporting for the transfer of hazardous material.	2	4, 6, 8	4.2.2.1, 6.3.1, 6.4.15, 6.6.9, 6.7.10, 8.8	-	4-3, 6-3 to 6-4, 6-12, 6-26, 6-45, 8-6
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.7 Borrow Pits and Quarry Sites	The Proponent shall provide information on all borrow pits and quarry sources required for the Project, in combination with the Borrow Pits and Quarry Management Plan (Subsection 9.4.12), and include:	2 10	4, 6 16	4.3.1.3, 6.6.4, 6.7.5 All	-	4-14, 6-20, 6-41 All

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.7 Borrow Pits and Quarry Sites	i. Maps for all sites that are to be used for borrow pits or quarries, indicating the ownership (Inuit Owned Land and Crown Land) of lands and principle geographic features (e.g., on or near eskers and other unique landscapes, the proximity to waterbodies and watercourses),	2 10	4, 6 16	4.3.1.3, 6.6.4, 6.7.5 3.5	-	4-14, 6-20, 6-41 16-5 to 16-9
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.7 Borrow Pits and Quarry Sites	ii. A discussion of how the borrow pits and quarry material will be extracted,	2 10	4, 6 16	4.3.1.3, 6.6.4, 6.7.5 3.4	-	4-14, 6-20, 6-41 16-4
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.7 Borrow Pits and Quarry Sites	iii. A discussion of how the precautionary principle has been incorporated in the design of the borrow pits and quarries in terms of minimizing potential effects to the environment, including wildlife and wildlife habitats, including fish habitat where sites are in close proximity to waterbodies and watercourses,	2 10	4, 6 16	4.3.1.3, 6.6.4, 6.7.5 6, 8	-	4-14, 6-20, 6-41 16-10 to 16-12, 16-14
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.7 Borrow Pits and Quarry Sites	iv. Characterization of the materials at potential borrow pit and quarry site locations including ARD and ML potential, the ground ice conditions and occurrences of massive ice,	2 10	4, 6 16	4.3.1.3, 6.6.4, 6.7.5 6.1	-	4-14, 6-20, 6-41 16-11 to 16-12
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.7 Borrow Pits and Quarry Sites	v. Estimates of the quantities of materials that will be extracted from each borrow pit and quarry site,	2 10	4, 6 16	4.3.1.3, 6.6.4, 6.7.5 3.5	Quantities will be addressed in detailed design, FEIS	4-14, 6-20, 6-41 16-5
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.7 Borrow Pits and Quarry Sites	vi. Estimates of quantities of materials required to build the ground transportation and site infrastructure for the Project,	2 10	4, 6 16	4.3.1.3, 6.6.4, 6.7.5 3.5	Quantities will be addressed in detailed design, FEIS	4-14, 6-20, 6-41 16-5
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.7 Borrow Pits and Quarry Sites	vii. Annual estimates of quantities required for maintenance associated with ground transportation, site infrastructure, and the port site, and	2 10	4, 6 16	4.3.1.3, 6.6.4, 6.7.5 3.5	Quantities will be addressed in detailed design, FEIS	4-14, 6-20, 6-41 3.5
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.7 Borrow Pits and Quarry Sites	viii. A description of proposed sediment, dust control and erosion measures in the design of the borrow pits and quarry sites.	2 10	4, 6 16	4.3.1.3, 6.6.4, 6.7.5 6	-	4-14, 6-20, 6-41 16-10 to 16-12
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.8 Power Generation	The Proponent shall provide the following information in conjunction with its Air Quality Monitoring and Management Plan (Subsection 9.4.14):	2	4, 6, 7	4.2.8, 6.4.9, 6.6.11, 6.7.11, 7.4, 7.8.9	-	4-12, 6-11, 6-27, 6-45, 7-31, 7-37
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.8 Power Generation	i. The energy balance for the proposed Project, including strategies for optimization and conservation,	2	4, 6, 7	4.2.8, 6.4.9, 6.6.11, 6.7.11, 7.4, 7.8.9	-	4-12, 6-11, 6-27, 6-45, 7-31, 7-37
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.8 Power Generation	ii. A discussion on how greenhouse gas emissions will be reduced,	2	4, 6, 7	4.2.8, 6.4.9, 6.6.11, 6.7.11, 7.4, 7.8.9	-	4-12, 6-11, 6-27, 6-45, 7-31, 7-37
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.8 Power Generation	iii. The type of power generation and associated infrastructure (i.e. power lines) that will be used over the Project lifespan,	2	4, 6, 7	4.2.8, 6.4.9, 6.6.11, 6.7.11, 7.4, 7.8.9	-	4-12, 6-11, 6-27, 6-45, 7-31, 7-37
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.8 Power Generation	iv. Locations (positioning) of power generation plants/stations relative to prevailing winds and other infrastructure,	2	4, 6, 7	4.2.8, 6.4.9, 6.6.11, 6.7.11, 7.4, 7.8.9	-	4-12, 6-11, 6-27, 6-45, 7-31, 7-37
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.8 Power Generation	v. A description of diesel power generation facilities, including sources, volumes of fuel to be used, transportation methods for fuel and associated transfer points, information regarding secondary containment measures to be employed and equipment and facilities for emergency clean-up, and	2	4, 6, 7	4.2.8, 6.4.9, 6.6.11, 6.7.11, 7.4, 7.8.9	-	4-12, 6-11, 6-27, 6-45, 7-31, 7-37
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.8 Power Generation	vi. Proposed accident/incident management and reporting.	2	4, 6, 7	4.2.8, 6.4.9, 6.6.11, 6.7.11, 7.4, 7.8.9	-	4-12, 6-11, 6-27, 6-45, 7-31, 7-37
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.9 Fuel and Explosives Facilities	The Proponent shall describe the following information, in conjunction with its Spill Contingency Plans, (Subsection 9.4.2), Hazardous Materials Management Plan (Subsection 9.4.8) and Explosives Management Plan (Subsection 9.4.13):	2 10	4, 6, 7, 8, 9 4, 5	4.3.6, 6.4.6, 6.4.7, 6.6.5, 6.6.6, 6.7.6, 6.7.7, 7.6, 8.12, 9.2.5 All	-	4-21, 6-10, 6-21, 6-22, 6-41, 6-42, 7-31, 7-32, 8-8, 9-5 All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.9 Fuel and Explosives Facilities	i. The location and characteristics of fuel and explosives storage and/or manufacturing infrastructure and facilities (e.g. explosives and detonator magazines, fuel storage, ammonium nitrate storage, maintenance/wash area, process trucks and their parking area, any offices, warehouses, buildings) as well as methods of secondary containment to be employed. This will include setback distances to vulnerable features (i.e. dwellings, roads, camps, bodies of water, etc.), and between explosives facilities and fuel storage/handling areas,	2	4, 6, 7, 8, 9	4.3.6, 6.4.6, 6.4.7, 6.6.5, 6.6.6, 6.7.6, 6.7.7, 7.6, 8.12, 9.2.5	-	4-21, 6-10, 6-21, 6-22, 6-41, 6-42, 7-31, 7-32, 8-8, 9-5
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.9 Fuel and Explosives Facilities	ii. Types and estimate of quantities of all fuel types, explosives, and other similar materials required for the duration of the Project,	2	4, 6, 7, 8, 9	4.3.6, 6.4.6, 6.4.7, 6.6.5, 6.6.6, 6.7.6, 6.7.7, 7.6, 8.12, 9.2.5	-	4-21, 6-10, 6-21, 6-22, 6-41, 6-42, 7-31, 7-32, 8-8, 9-5
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.9 Fuel and Explosives Facilities	iii. Proposed measures to ensure the fuel used for mine related activities conforms with Canadian regulations (Government of Canada, 1990, 1991, 1997, 1999b, 1999c, and 2002b),	2 10	4, 6, 7, 8, 9 4	4.3.6, 6.4.6, 6.4.7, 6.6.5, 6.6.6, 6.7.6, 6.7.7, 7.6, 8.12, 9.2.5 4.0, 7.0	-	4-21, 6-10, 6-21, 6-22, 6-41, 6-42, 7-31, 7-32, 8-8, 9-5 4-2 to 4-3, 4-15 to 4-17
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.9 Fuel and Explosives Facilities	iv. Operational plans including Oil Pollution Prevention and/or Emergency Plans in connection with the Spill Contingency, and Oil Handling Facility Contingency Plan, and	2 10	4, 6, 7, 8, 9 3, 4, 5	4.3.6, 6.4.6, 6.4.7, 6.6.5, 6.6.6, 6.7.6, 6.7.7, 7.6, 8.12, 9.2.5 All	-	4-21, 6-10, 6-21, 6-22, 6-41, 6-42, 7-31, 7-32, 8-8, 9-5 All
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.9 Fuel and Explosives Facilities	v. Methods of fuel transfer and transportation from sources to and around site.	2 10	4, 6, 7, 8, 9 4, 6	4.3.6, 6.4.6, 6.4.7, 6.6.5, 6.6.6, 6.7.6, 6.7.7, 7.6, 8.12, 9.2.5 6.0, 4.1, 9.3.2	-	4-21, 6-10, 6-21, 6-22, 6-41, 6-42, 7-31, 7-32, 8-8, 9-5 4-4, 6-8, 6-28
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.10 Exploration	The Proponent shall provide the following information for ongoing exploration:	2	2, 3, 4, 6	2.1.11, 3, 4.3.1.4, 4.3.5, 6.6.1.4, 6.7.1.3	-	2-5, 3-1, 4-15, 4-20, 6-17, 6-38
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.10 Exploration	i. Areas proposed for ongoing geotechnical investigations and mineral exploration, including drilling, over the duration of the various Project areas,	2	2, 3, 4, 6	2.1.11, 3, 4.3.1.4, 4.3.5, 6.6.1.4, 6.7.1.3	-	2-5, 3-1, 4-15, 4-20, 6-17, 6-38

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.10 Exploration	ii. A description of any exploration activities occurring on or near waterbodies and the mitigation measures that will be implemented to prevent impacts to aquatic life including fish and fish habitat as defined in the Fisheries Act,	2	2, 3, 4, 6	2.1.11, 3, 4.3.1.4, 4.3.5, 6.6.1.4, 6.7.1.3	-	2-5, 3-1, 4-15, 4-20, 6-17, 6-38
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.10 Exploration	iii. A description of any seismic activities to be undertaken, including a clear delineation of the location of such activities in proximity to water bodies and the anticipated effects of such activities on aquatic life, as well as proposed measures to mitigate identified impacts,	2	2, 3, 4, 6	2.1.11, 3, 4.3.1.4, 4.3.5, 6.6.1.4, 6.7.1.3	-	2-5, 3-1, 4-15, 4-20, 6-17, 6-38
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.10 Exploration	iv. Temporary field facilities, equipment to be used, and required ground and air transport frequencies,	2	2, 3, 4, 6	2.1.11, 3, 4.3.1.4, 4.3.5, 6.6.1.4, 6.7.1.3	-	2-5, 3-1, 4-15, 4-20, 6-17, 6-38
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.10 Exploration	v. Proposed wildlife mitigation and monitoring measures associated with exploration program (e.g., compliance with the minimum flight altitudes if aerial surveys are planned or conducted, timing and type of surveys, etc.),	2	2, 3, 4, 6	2.1.11, 3, 4.3.1.4, 4.3.5, 6.6.1.4, 6.7.1.3	-	2-5, 3-1, 4-15, 4-20, 6-17, 6-38
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.10 Exploration	vi. Proposed mitigation to reduce interaction with other current land users, such as Tourism Operators or harvesters,	2	2, 3, 4, 6	2.1.11, 3, 4.3.1.4, 4.3.5, 6.6.1.4, 6.7.1.3	-	2-5, 3-1, 4-15, 4-20, 6-17, 6-38
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.10 Exploration	vii. A description of any exploration activities occurring near or interacting with other current land users, such as Tourism Operators or harvesters,	2	2, 3, 4, 6	2.1.11, 3, 4.3.1.4, 4.3.5, 6.6.1.4, 6.7.1.3	-	2-5, 3-1, 4-15, 4-20, 6-17, 6-38
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.10 Exploration	viii. Proposed mitigation and monitoring measures designed to protect archaeological and cultural resources from being impacted by ongoing exploration, and	2	2, 3, 4, 6	2.1.11, 3, 4.3.1.4, 4.3.5, 6.6.1.4, 6.7.1.3	-	2-5, 3-1, 4-15, 4-20, 6-17, 6-38
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.10 Exploration	ix. Management plans for drilling waste disposal and drill site reclamation.	2	2, 3, 4, 6	2.1.11, 3, 4.3.1.4, 4.3.5, 6.6.1.4, 6.7.1.3	-	2-5, 3-1, 4-15, 4-20, 6-17, 6-38
6.0 PROJECT COMPONENTS AND ACTIVITIES	6.6 DETAILED PROJECT PROPOSAL DESCRIPTION	6.6.11 Ancillary Project Facilities and Infrastructure	The Proponent shall describe any other relevant project facilities and infrastructure not detailed in Section 6.6, including those related to logistics coordination, site administration or personnel accommodations, for example.	NA	NA	NA	No facilities not described in above concordance.	NA
7.0 IMPACT ASSESSMENT METHODOLOGY	7.1 PUBLIC CONSULTATION		As identified in Section 2.2, the Proponent shall provide highlights of any public consultation and/or engagement undertaken in the EIS in order to address concerns of the general public regarding the anticipated or potential environmental effects of the Project.	3	1	1.3, 1.4, 1.5, 1.6, Appendices V3-1A, V3-1B	-	1-5 to 1-43, Appendices V3-1A, V3-1B
7.0 IMPACT ASSESSMENT METHODOLOGY	7.1 PUBLIC CONSULTATION		The Proponent shall also describe how communication was facilitated with the public through accommodating regional languages/dialects, not only through translation but through interpretation at any community or public meetings held.	3	1	1.5.1, 1.5.3	-	1-19, 1-21 to 1-32
7.0 IMPACT ASSESSMENT METHODOLOGY	7.1 PUBLIC CONSULTATION		A summary of key dialogues and identified issue areas from pre-consultation and consultation activities, along with any commitments made by the Proponent to communities during these discussions. This information must be presented in the EIS and will enable responsible agencies and the NIRB to:	3	1	1.6.3, Table 1.6-1, Appendices V3-1C, V3-1E, V3-1G	-	1-36 to 1-43, Appendices V3-1E, V3-1G
7.0 IMPACT ASSESSMENT METHODOLOGY	7.1 PUBLIC CONSULTATION		i. Assess the transparency, meaningfulness and completeness of community consultation efforts,	3	1	1.3, 1.4, 1.5, 1.6, Appendices V3-1A, V3-1B, V3-1C, V3-1E	-	1-5 to 1-43, Appendices V3-1A, V3-1B, V3-1C, V3-1E
7.0 IMPACT ASSESSMENT METHODOLOGY	7.1 PUBLIC CONSULTATION		ii. Understand messages communicated within the process of dialogue,	3	1	1.6.3, Table 1.6-1, Appendices V3-1C, V3-1E, V3-1G	-	1-36, 1-39, Appendices V3-1C, V3-1E, V3-1G
7.0 IMPACT ASSESSMENT METHODOLOGY	7.1 PUBLIC CONSULTATION		iii. Obtain an increased understanding of the expectations held within communities based upon responses to specific issues raised, and	3	1	1.6.3, Table 1.6-1, Appendices V3-1C, V3-1E, V3-1G	-	1-36, 1-39, Appendices V3-1C, V3-1E, V3-1G
7.0 IMPACT ASSESSMENT METHODOLOGY	7.1 PUBLIC CONSULTATION		iv. Assess how public participation has influenced the development of the Project with an analysis of community support for, and opposition to, the Project.	3	1	1.6.2, 1.6.3, Table 1.6-1, 1.7	-	1-35 to 1-26, 1-39, 1-44
7.0 IMPACT ASSESSMENT METHODOLOGY	7.1 PUBLIC CONSULTATION		The Proponent is expected to address concerns that are voiced regarding its own meaningful consultation and is required to:	3	1	Table 1.6-1	-	1-39
7.0 IMPACT ASSESSMENT METHODOLOGY	7.1 PUBLIC CONSULTATION		i. Continue to provide up-to-date information describing the Project to the public, particularly residents of communities likely to be most affected by the Project,	3	1	1.1.2, 1.2.3, 1.7	-	1-1, 1-4, 1-44
7.0 IMPACT ASSESSMENT METHODOLOGY	7.1 PUBLIC CONSULTATION		ii. Involve the public in determining how best to deliver that information, (i.e. the types of information required, translation and interpreting needs, timing of consultations, different formats, the possible need for community meetings), and	3	1	1.5.3, 1.6.3.1, 1.7	-	1-27 to 1-31, 1-36, 1-44
7.0 IMPACT ASSESSMENT METHODOLOGY	7.1 PUBLIC CONSULTATION		iii. Explain the findings documented within the EIS in a clear and direct manner to make the issues comprehensible to as wide an audience as possible.	3	1	1.6.3, Table 1.6-1, Appendix V3-1G	-	1-36 to 1-43, Appendix V3-1G
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		The Proponent shall, with reference to Section 2.3, present and justify its definition of TK and shall explain the methodology used to collect TK, including:	3	3	3.1.2, 3.2, 3.3	-	3-1, 3-34 to 3-42
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		i. The format and location of meetings, interviews, and other data gathering efforts,	3	3	3.2, Appendices V3-3A, V3-3B	A full report on the methods and results of the theme-based TK workshops conducted for the Project will additionally be presented in Sabina's FEIS submission.	3-34 to 3-39, Appendices V3-3A, V3-3B
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		ii. A description of background information provided to informants,	3	3	3.2, Appendix V3-3A	A full report on the methods and results of the theme-based TK workshops conducted for the Project will additionally be presented in Sabina's FEIS submission.	3-34 to 3-39, Appendix V3-3A
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		iii. The level of community participation and composition of participants,	3	3	3.2, Appendix V3-3A	A full report on the methods and results of the theme-based TK workshops conducted for the Project will additionally be presented in Sabina's FEIS submission.	3-34 to 3-39, Appendix V3-3A

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		iv. The design of TK studies, including lists of interview questions posed to informants or other tools used in the study,	3	3	3.2, Appendices V3-3A, V3-3B	A full report on the methods and results of the theme-based TK workshops conducted for the Project will additionally be presented in Sabina's FEIS submission.	3-34 to 3-39, Appendices V3-3A, V3-3B
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		v. The selection process for participants in such studies, including participants residing outside of the NSA,	3	3	3.2, Appendix V3-3A	A full report on the methods and results of the theme-based TK workshops conducted for the Project will additionally be presented in Sabina's FEIS submission.	3-34 to 3-39, Appendix V3-3A
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		vi. Types of TK collected, and	3	3	3.2, 3.3, Appendices V3-3A, V3-3B	A full report on the methods and results of the theme-based TK workshops conducted for the Project will additionally be presented in Sabina's FEIS submission.	3-34 to 3-42, Appendices V3-3A, v3-3B
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		vii. Associated issues related to any proprietary status of TK used.	3	3	3.2, Appendix V3-3A	A full report on the methods and results of the theme-based TK workshops conducted for the Project will additionally be presented in Sabina's FEIS submission.	3-34 to 3-39, Appendix V3-3A
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		The Proponent shall summarize what kinds of TK were collected and describe the roles and responsibilities of all concerned individuals and organizations in collecting, analyzing, interpreting and synthesizing the TK data.	3	3	3.2, 3.3, Appendices V3-3A, V3-3B	A full report on the methods and results of the theme-based TK workshops conducted for the Project will additionally be presented in Sabina's FEIS submission.	3-34 to 3-42, Appendices V3-3A, v3-3B
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		The Proponent shall also indicate whether special efforts were made to collect TK from Inuit Elders, women, youth, special groups, and harvesters familiar with the Project area.	3	3	3.2, Appendix V3-3A	A full report on the methods and results of the theme-based TK workshops conducted for the Project will additionally be presented in Sabina's FEIS submission.	3-34 to 3-39, Appendix V3-3A
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		Any measures to protect the anonymity and to secure the informed consent of TK providers should be outlined as well as any special restrictions on uses of certain types of TK as stipulated by TK holders.	3	3	3.2, Appendix V3-3A	A full report on the methods and results of the theme-based TK workshops conducted for the Project will additionally be presented in Sabina's FEIS submission.	3-34 to 3-39, Appendix V3-3A
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		In all sections of the EIS, the Proponent shall discuss how it weighed and incorporated TK in areas such as baseline data collection, impact prediction, significance assessment and the development of mitigation and monitoring programs.	3	3	3.3, Table 3.1-1	In Volume 3 see section 3.3 for a description of the role of TK in Project planning and design. Also see Table 3.1-1 for details on how TK was specifically incorporated in relevant DEIS volumes.	3-39 to 3-42, Appendix V3-3A
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		The Proponent shall explain how it integrated TK and popular science, including the manner in which it reconciled any apparent discrepancies between the two types of knowledge.	3	3	3.1.2, 3.1.3, 3.3	3.3.5 specifically reviews how discrepancies were dealt with VEC and VSEC volumes of the DEIS also describe this in more detail	3-1 to 3-33, 3-39 to 3-42
7.0 IMPACT ASSESSMENT METHODOLOGY	7.2 TRADITIONAL KNOWLEDGE		The Proponent shall include a discussion on how it dealt with discrepancies within TK (variation between individuals) and describe how and where TK is being used to address gaps in currently available scientific data.	3	3	3.3.5	VEC and VSEC volumes of the DEIS also describe this in more detail	3-42
7.0 IMPACT ASSESSMENT METHODOLOGY	7.3 BASELINE INFORMATION COLLECTION		The Proponent shall present baseline data, including TK, in relation to the existing biophysical and socio-economic environments relevant to the assessment of potential impacts from the Project for all proposed phases. Potential for changes in baseline conditions due to exploration activities and any potential NLCA 12.10.2 exception applications, if applicable and as may be related to the Project, must be taken into consideration.	4 5 6 7 8 9	1, 2 5, 6, 7, 8, 9, 10, 11 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.1 , X.2 X.1 , X.2 X.1 , X.2 X.1 , X.2 X.1 , X.2 1.2.2	-	1-1 to 1-11, 2-1 to 2-7 5-1 to 5-77, 6-1 to 6-30, 7-1 to 7-15, 8-1 to 8-28, 9-1 to 9-28, 10-1 to 10-17 1-1 to 1-33, 4-1 to 4-31, 5-1 to 5-18, 6-1 to 6-49, 7-1 to 7-31 2-1 to 2-15, 3-1 to 3-11, 4-1 to 4-33, 5-1 to 5-15, 6-1 to 6-16, 7-1 to 7-11 1-1 to 1-12, 3-1 to 3-24, 4-1 to 4-25, 5-1 to 5-15 1-2
7.0 IMPACT ASSESSMENT METHODOLOGY	7.3 BASELINE INFORMATION COLLECTION		The Proponent shall explain methodologies for baseline data collection, evaluation of the adequacy of data, confidence levels associated with baseline data, and identification of significant gaps in knowledge and understanding. The associated uncertainties and the steps to be taken to fill information gaps should be discussed.	3 4 5 6 7 8 9	3 All All All All All 1	3.3.5 X.1 X.1 X.1 X.1 X.1 1.2.2	-	3-42 1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13 1-1 to 1-4

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.3 BASELINE INFORMATION COLLECTION		The Proponent should consider other available information containing baseline data related to the Project region, including a review of published literature, technical scientific reports, and peer-reviewed scientific literature to present a complete picture of baseline conditions.	4 5 6 7 8 9	All All All All All 1	X.1 X.1 X.1 X.1 X.1 1.2.2	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13 1-1 to 1-4
7.0 IMPACT ASSESSMENT METHODOLOGY	7.3 BASELINE INFORMATION COLLECTION		To identify natural fluctuations and trends including cyclical and other recurrent phenomena, the Proponent shall collect baseline data to reflect sufficient time, depth and geographic broadness of both temporal and spatial scale (e.g. populations and distributions of wildlife VECs are known to fluctuate in cyclic trends over extensive time periods and geographic ranges).	4 5 6 7 8 9	All All All All All 1	X.1 X.1 X.1 X.1 X.1 1.2.2	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13 1-1 to 1-4
7.0 IMPACT ASSESSMENT METHODOLOGY	7.3 BASELINE INFORMATION COLLECTION		In order to understand the natural ecological conditions and the potential impacts from the Project on these conditions, the Proponent should consider the design of all biophysical environmental monitoring programs to ensure that the baseline data required is useful in understanding the relationship between the natural ecological conditions and the potential Project impacts on these conditions. This would improve interpretation of monitoring data in order to differentiate between natural variability and project-specific impacts.	4 5 6 7 8 9	All All All All All 1	X.1 X.1 X.1 X.1 X.1 1.2.2	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13 1-1 to 1-4
7.0 IMPACT ASSESSMENT METHODOLOGY	7.3 BASELINE INFORMATION COLLECTION		Furthermore, to ensure post-monitoring impact analysis is not confounded by temporal variation, the Proponent should incorporate reference site sampling as part of its routine baseline sampling.	4 5 6 7 8 9 10	All All All All All 1 20	X.1 X.1 X.1 X.1 X.1 1.2.2 All	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13 1-1 to 1-4 All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.3 BASELINE INFORMATION COLLECTION		The Proponent shall make any linkages explicit and describe the trade-offs. For example, deficiencies in baseline data increase uncertainties in the prediction of potential impacts, and consequently require an intensification of corresponding monitoring and mitigation programs (Section 9.3), and follow up and adaptive management plans (Section 9.7).	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 All	X.5.1, X.5.4 X.5.1, X.5.4 X.5.1, X.5.4 X.5.1, X.5.4 X.5.1, X.5.4 All	Characterization of residual effects sections (X.5.4), methodology sections (X.5.1)	1-15 to 1-19, 1-26, 2-11 to 2-13, 2-32 to 2-33 4-26 to 4-28, 4-33 to 4-60, 5-83 to 5-85, 5-112 to 5-114, 6-35 to 6-37, 6-59 to 6-61, 7-19 to 7-21, 7-43 to 7-45, 8-30 to 8-34, 8-62 to 8-65, 9-30 to 9-35, 9-52 to 9-54, 10-21 to 10-24, 10-45 to 10-48 1-41 to 1-44, 4-35 to 4-38, 4-53 to 4-56, 5-21 to 5-24, 5-36 to 5-39, 6-53 to 6-54, 6-67, 7-35 to 7-36, 7-44 2-16 to 2-20, 2-34 to 2-37, 3-12 to 3-17, 3-27 to 3-29, 4-36 to 4-39, 4-43, 5-19 to 5-20, 5-25, 6-18 to 6-22, 6-34 to 6-35, 7-15 to 7-17, 7-36 1-15 to 1-16, 1-30 to 1-32, 3-37 to 3-41, 3-83 to 3-86, 4-32 to 4-36, 4-53 to 4-55, 5-19 to 5-21, 5-31 to 5-43 All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.3 BASELINE INFORMATION COLLECTION		The description of the existing baseline and the environmental trends should include a consideration of past projects and activities carried out by the Proponent and/or others within the RSA.	4 5 6 7 8 9	All All All All All 1	X.1 X.1 X.1 X.1 X.1 1.2.2	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13 1-1 to 1-4

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.4 USE OF EXISTING INFORMATION		In preparing its EIS, the NIRB expects that the Proponent will rely on the use of existing information and available results of surveys and studies completed in the Project region or in Nunavut by other developers, government agencies, organizations, institutions, regional authorities and individual researchers as such may lend information as pertaining to the Project and/or the environment. For example, 'lessons learned' already exist in relation to previous and/or currently active projects in Nunavut (e.g. the Meadowbank Gold Mine, the Jericho Diamond Mine, the Doris North Gold Mine, Ekati and Diavik Diamond Mines, etc.) and this information should be captured by the Proponent.	4 5 6 7 8 9	All All All All All 1	X.1 X.1 X.1 X.1 X.1 1.2.2	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13 1-1 to 1-4
7.0 IMPACT ASSESSMENT METHODOLOGY	7.4 USE OF EXISTING INFORMATION		When using existing information to meet the requirements of various sections of the EIS Guidelines, the Proponent should either include the information directly in the EIS with clear references indicating the source of information (i.e. document, section, and page numbers), or use cross-references to direct reviewers (the document, section and page number) to where they may obtain the information within the EIS or its supporting documents.	4 5 6 7 8 9	All All All All All 1	X.1 X.1 X.1 X.1 X.1 1.2.2	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13 1-1 to 1-4
7.0 IMPACT ASSESSMENT METHODOLOGY	7.4 USE OF EXISTING INFORMATION		The Proponent must also clarify how representative the data are, clearly separating factual lines of evidence from inference, and state any limitations on the inferences or conclusions that can be drawn from them.	4 5 6 7 8 9	All All All All All 1	X.1 X.1 X.1 X.1 X.1 1.2.2	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13 1-1 to 1-4
7.0 IMPACT ASSESSMENT METHODOLOGY	7.4 USE OF EXISTING INFORMATION		If conflicting information is encountered from either scientific based or TK sources, it is suggested that these conflicting viewpoints be identified and presented in a balanced manner along with the Proponent's conclusions.	3 4 5 6 7 8 9	3 All All All All All 1	3.3.5 X.2 X.2 X.2 X.2 X.2 1.2.2	-	3-42 1-10 to 1-11, 2-6 to 2-7, 3-16 to 3-17 1-12 to 1-13, 2-27 to 2-28, 3-21 to 3-22, 4-17 to 4-19, 5-74 to 5-77, 6-20 to 6-30, 7-13 to 7-15, 8-23 to 8-28, 9-25 to 9-27, 10-15 to 10-17 1-32 to 1-33, 2-28 to 2-30, 3-17 to 3-18, 4-30 to 4-31, 5-17 to 5-18, 6-46 to 6-49, 7-28 to 7-31 1-31 to 1-32, 2-14 to 2-15, 3-10 to 3-11, 4-30 to 4-33, 5-12 to 5-15, 6-13 to 6-16, 7-7 to 7-11 1-11 to 1-12, 2-2, 3-22 to 3-23, 4-21 to 4-25, 5-12 to 5-15, 6-13 to 6-18 1-1 to 1-4
7.0 IMPACT ASSESSMENT METHODOLOGY	7.4 USE OF EXISTING INFORMATION		The EIS must clearly document any information or knowledge gaps encountered in the existing literature or other information sources, and discuss how these gaps might affect the ability to draw conclusions and the reliability of those conclusions drawn in the assessment.	4 5 6 7 8 9	All All All All All 1	X.1, X.2 X.1, X.2 X.1, X.2 X.1, X.2 X.1, X.2 1.2.2	-	1-1 to 1-11, 2-1 to 2-7, 3-1 to 3-17 1-1 to 1-13, 2-1 to 2-28, 3-1 to 3-22, 4-1 to 4-19, 5-1 to 5-77, 6-1 to 6-30, 7-1 to 7-15, 8-1 to 8-28, 9-1 to 9-27, 10-1 to 10-17 1-1 to 1-33, 2-1 to 2-30, 3-1 to 3-18, 4-1 to 4-31, 5-1 to 5-18, 6-1 to 6-49, 7-1 to 7-31 1-1 to 1-32, 2-1 to 2-15, 3-1 to 3-11, 4-1 to 4-33, 5-1 to 5-15, 6-1 to 6-16, 7-1 to 7-11 1-1 to 1-12, 2-1 to 2-2, 3-1 to 3-23, 4-1 to 4-25, 5-1 to 5-15, 6-1 to 6-18 1-1 to 1-4
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	The spatial boundaries of the assessment of the Project, and its components, shall be determined on the basis of the Project's potential impacts on the particular biophysical, social and/or economic environment being addressed.	4 5 6 7 8 9	All All All All Al 1	X.1 X.1 X.1 X.1 X.1 1.2.3.2	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	In accordance with the NIRB's definition of local and regional study areas, the Proponent shall consider the following criteria when establishing spatial boundaries for the assessment of the Project:	-	-	-	-	-

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	i. The physical or socio-economic extent of project activities,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.4 X.4 X.4 X.4 X.4 1.2.3.2	-	1-12 to 1-15, 2-8 to 2-11 4-25 to 4-26, 5-80 to 5-83, 6-32 to 6-35, 7-16 to 7-19, 8-29 to 8-30, 9-29 to 9-30, 10-18 to 10-21 1-34 to 1-41, 4-32 to 4-35, 5-18 to 5-21, 6-50 to 6-53, 7-32 to 7-35 2-15 to 2-16, 3-11 to 3-12, 4-35 to 4-36, 5-16 to 5-19, 6-17 to 6-18, 7-12 to 7-15 1-12 to 1-15, 3-36 to 3-37, 4-31 to 4-32, 5-16 to 5-19 1-16 to 1-17
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	ii. The extent of ecosystems potentially affected by the Project,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.4 X.4 X.4 X.4 X.4 1.2.3.2, 1.3.4.3	-	1-12 to 1-15, 2-8 to 2-11 4-25 to 4-26, 5-80 to 5-83, 6-32 to 6-35, 7-16 to 7-19, 8-29 to 8-30, 9-29 to 9-30, 10-18 to 10-21 1-34 to 1-41, 4-32 to 4-35, 5-18 to 5-21, 6-50 to 6-53, 7-32 to 7-35 2-15 to 2-16, 3-11 to 3-12, 4-35 to 4-36, 5-16 to 5-19, 6-17 to 6-18, 7-12 to 7-15 1-12 to 1-15, 3-36 to 3-37, 4-31 to 4-32, 5-16 to 5-19 1-16 to 1-17, 1-44 to 1-45
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	iii. The extent to which traditional and contemporary land and resource use, including protected areas, and other harvesting activities could potentially be affected by the Project, and	8	4	4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10	-	4-1 to 4-80
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	iv. The size, nature and location of past, present, and reasonably foreseeable projects and activities which could interact with the items listed above.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.6.1 X.6.1 X.6.1 X.6.1 X.6.1 1.3.4	-	1-28, 2-33 to 2-35 4-63, 5-114 to 5-119, 6-62 to 6-64, 7-45 to 7-48, 8-65 to 8-68, 9-54 to 9-56, 10-48 to 10-50 1-51 to 1-52, 4-56 to 4-58, 5-39 to 5-41, 6-67, 7-44 2-39, 3-29 to 3-31, 4-43, 5-25, 6-35 to 6-38, 7-36 1-32 to 1-33, 3-92 to 3-98, 4-58 to 4-64, 5-43 1-37 to 1-45
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	The EIS shall define the spatial boundaries of the maximum area potentially affected by the Project, based on the boundaries for each individual type of impact, taking into account other relevant factors such as the migratory and/or life cycle of wildlife species where applicable, the socio-economic or other economic indicators.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.4, X.6.1 X.4, X.6.1 X.4, X.6.1 X.4, X.6.1 X.4, X.6.1 1.2.3.2, 1.3.4.3	-	1-12 to 1-15, 1-28, 2-8 to 2-11, 2-33 to 2-35 4-25 to 4-26, 4-63, 5-80 to 5-83, 5-114 to 5-118, 6-32 to 6-35, 6-62, 6-64, 7-16 to 7-19, 7-45 to 7-48, 8-29 to 8-30, 8-65 to 8-68, 9-29 to 9-30, 9-54 to 9-56, 10-18 to 10-21, 10-48 to 10-50 1-34 to 1-41, 1-51 to 1-52, 4-32 to 4-35, 4-56 to 4-58, 5-18 to 5-21, 5-39 to 5-41, 6-50 to 6-53, 6-67, 7-32 to 7-35, 7-44 2-15 to 2-16, 2-39, 3-11 to 3-12, 3-29 to 3-31, 4-35 to 4-36, 4-43, 5-16 to 5-19, 5-25, 6-17 to 6-18, 6-35 to 6-38, 7-12 to 7-15, 7-36 1-12 to 1-15, 1-32 to 1-33, 3-36 to 3-37, 3-92 to 3-98, 4-31 to 4-32, 4-58 to 4-64, 5-16 to 5-19, 5-43 1-16 to 1-17, 1-37 to 1-45
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	Identification of spatial boundaries should also take into account various impact pathways such as pollutant transport and bioaccumulation mechanisms.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.4, X.5.1 X.4, X.5.1 X.4, X.5.1 X.4, X.5.1 X.4, X.5.1 1.2.3.2, 1.3.4.3	-	1-12 to 1-15, 2-8 to 2-11 4-25 to 4-26, 5-80 to 5-85, 6-32 to 6-37, 7-16 to 7-21, 8-29 to 8-34, 9-29 to 9-35, 10-18 to 10-24 1-34 to 1-44, 4-32 to 4-36, 5-18 to 5-23, 6-50 to 6-54, 7-32 to 7-35 2-15 to 2-20, 3-11 to 3-17, 4-35 to 4-39, 5-16 to 5-19, 6-17 to 6-22, 7-12 to 7-17 1-12 to 1-16, 3-36 to 3-41, 4-31 to 4-36, 5-16 to 5-19 1-16 to 1-17, 1-44 to 1-45
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	Traditional and contemporary land use and occupancy for the past, present, and future, should be considered in addition to other factors when determining spatial boundaries for the impact assessment of the Project.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.2, X.4, X.5.1, X.6.1 X.2, X.4, X.5.1, X.6.1 X.2, X.4, X.5.1, X.6.1 X.2, X.4, X.5.1, X.6.1 X.2, X.4, X.5.1, X.6.1 1.2.3.2, 1.3.4.3	-	1-10 to 1-15, 1-28, 2-7 to 2-11, 2-33 to 2-35 4-25 to 4-26, 4-63, 5-80 to 5-85, 5-114 to 5-116, 6-32 to 6-37, 6-62 to 6-64, 7-16 to 7-21, 7-45 to 7-47, 8-29 to 8-34, 5-65 to 8-67, 9-29 to 9-35, 9-54 to 9-56, 10-18 to 10-24, 10-48 to 10-50 1-32 to 1-44, 1-51 to 1-52, 4-30 to 4-36, 4-56 to 4-58, 5-17 to 5-23, 5-39 to 5-40, 6-46 to 6-54, 6-67, 7-28 to 7-35, 7-44 2-14 to 2-20, 2-39, 3-10 to 3-17, 3-29 to 3-31, 4-30 to 4-33, 4-35 to 4-39, 4-43, 5-12 to 5-19, 5-25, 6-13 to 6-22, 6-35 to 6-38, 7-7 to 7-10, 7-12 to 7-17, 7-36 1-11 to 1-16, 1-32 to 1-33, 3-22 to 3-24, 3-36 to 3-41, 3-92 to 3-98, 4-21 to 4-25, 4-31 to 4-36, 4-58 to 4-64, 5-12 to 5-19, 5-43 1-16 to 1-17, 1-44 to 1-45
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	The Proponent is not required to provide a comprehensive baseline description of the environment at each of the above scales, but must provide sufficient detail to address the relevant environmental and cumulative effects of the Project. For example, the spatial boundaries for archaeological studies related to burial grounds in the Project area might reasonably be expected to differ from those for studies on migration of caribou in the area.	4 5 6 7 8 9	All All All All All 1	X.1 X.1 X.1 X.1 X.1 1.2.2	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13 1-1 to 1-4
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	The boundaries for the assessment of socio-economic impacts shall be based on an analysis of the socio-economic effects directly and indirectly associated with the Project. In all cases, priority focus shall be directed to potential impacts within Nunavut, but the EIS shall also consider potential impacts outside of Nunavut, wherever there is reason to anticipate that they might occur.	8	3	3.4, 3.6.1.1	-	3-36 to 3-37, 3-93

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	The EIS must contain a justification and rationale for all spatial boundaries and scales chosen.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.4, X.6.1 X.4, X.6.1 X.4, X.6.1 X.4, X.6.1 X.4, X.6.1 1.2.3.2, 1.3.4.3	-	1-12 to 1-15, 1-28, 2-8 to 2-11, 2-33 to 2-35 4-25 to 4-26, 4-63, 5-80 to 5-83, 5-114 to 5-116, 6-32 to 6-35, 6-62 to 6-64, 7-16 to 7-19, 7-45 to 7-47, 8-29 to 8-30, 8-65 to 8-67, 9-29 to 9-30, 9-54 to 9-56, 10-18 to 10-21, 10-48 to 10-50 1-34 to 1-41, 1-51 to 1-52, 4-32 to 4-35, 4-56 to 4-58, 5-18 to 5-21, 5-39 to 5-40, 6-50 to 6-53, 6-67, 7-32 to 7-35, 7-44 2-15 to 2-16, 2-39, 3-11 to 3-12, 3-29 to 3-31, 4-35 to 4-36, 4-43, 5-16 to 5-19, 5-25, 6-17 to 6-18, 6-35 to 6-38, 7-12 to 7-15, 7-36 1-12 to 1-15, 1-32 to 1-33, 3-36 to 3-37, 3-92 to 3-98, 4-31 to 4-32, 4-58 to 4-64, 5-16 to 5-19, 5-43 1-16 to 1-17, 1-44 to 1-45
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	The following general spatial boundaries are suggested, noting that the LSAs and RSAs may vary between disciplines and between VECs/VSECs, as they represent the likely distribution of project effects on individual VECs/VSECs:	-	-	-	-	-
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	i. Local Study Area (LSA): the Local Study Area shall be defined as that area where there exists the reasonable potential for immediate impacts due to Project activities, ongoing normal activities, or to possible abnormal operating conditions. The Local Study Area includes the Project facilities, buildings and infrastructure, and all areas proposed for Project activities, including entire proposed shipping routes in the NSA.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.4	-	1-12 to 1-15, 2-8 to 2-11 4-25 to 4-26, 5-80 to 5-83, 6-32 to 6-35, 7-16 to 7-19, 8-29 to 8-30, 9-29 to 9-30, 10-18 to 10-21 1-34 to 1-41, 4-32 to 4-35, 5-18 to 5-21, 6-50 to 6-53, 7-32 to 7-35 2-15 to 2-16, 3-11 to 3-12, 4-35 to 4-36, 5-16 to 5-19, 6-17 to 6-18, 7-12 to 7-15 1-12 to 1-15, 3-36 to 3-37, 4-31 to 4-32, 5-16 to 5-19 1-16 to 1-17
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.1 Spatial Boundaries	ii. Regional Study Area (RSA): the Regional Study Area shall be defined as the area within which there exists the potential for direct, indirect, and/or cumulative biophysical and socio-economic effects. This area includes lands, communities, and portions of Nunavut and other regions of Canada that may be relevant to the assessment of wide- spread effects of the Project. The Proponent is advised to duly consider the transboundary implications of impacts to identified VECs/VSECs as results of air transportation and marine shipping for the Project.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.4 X.4 X.4 X.4 X.4 1.2.3.2	-	1-12 to 1-15, 2-8 to 2-11 4-25 to 4-26, 5-80 to 5-83, 6-32 to 6-35, 7-16 to 7-19, 8-29 to 8-30, 9-29 to 9-30, 10-18 to 10-21 1-34 to 1-41, 4-32 to 4-35, 5-18 to 5-21, 6-50 to 6-53, 7-32 to 7-35 2-15 to 2-16, 3-11 to 3-12, 4-35 to 4-36, 5-16 to 5-19, 6-17 to 6-18, 7-12 to 7-15 1-12 to 1-15, 3-36 to 3-37, 4-31 to 4-32, 5-16 to 5-19 1-16 to 1-17
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.2 Temporal Boundaries	The EIS shall determine the temporal boundaries separately for the construction, operation, maintenance, temporary closure, final closure, and post-closure periods, including planned exploration to be undertaken in conjunction with the Project. A temporary closure period (i.e. care & maintenance) is understood to encompass the period of un-timely closure of the Project and specifies care and maintenance activities while the final closure period would include decommissioning and reclamation activities. The post-closure period covers the timespan after the Project has been decommissioned and abandoned, once the site has been reclaimed and returned as much as possible to its natural state. The temporal boundaries of the post-closure period may encompass many years, depending on the site, the type of Project and the methods of closure.)	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.4 X.4 X.4 X.4 X.4 1.2.3.2	-	1-12 to 1-15, 2-8 to 2-11 4-25 to 4-26, 5-80 to 5-83, 6-32 to 6-35, 7-16 to 7-19, 8-29 to 8-30, 9-29 to 9-30, 10-18 to 10-21 1-34 to 1-41, 4-32 to 4-35, 5-18 to 5-21, 6-50 to 6-53, 7-32 to 7-35 2-15 to 2-16, 3-11 to 3-12, 4-35 to 4-36, 5-16 to 5-19, 6-17 to 6-18, 7-12 to 7-15 1-12 to 1-15, 3-36 to 3-37, 4-31 to 4-32, 5-16 to 5-19 1-16 to 1-17
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.2 Temporal Boundaries	The Proponent shall also consider, where applicable, the temporal bounds of Project alternatives under assessment, noting where they differ from those for the preferred option.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.4 X.4 X.4 X.4 X.4 1.2.3.2	This will be addressed in detailed design, FEIS	1-12 to 1-15, 2-8 to 2-11 4-25 to 4-26, 5-80 to 5-83, 6-32 to 6-35, 7-16 to 7-19, 8-29 to 8-30, 9-29 to 9-30, 10-18 to 10-21 1-34 to 1-41, 4-32 to 4-35, 5-18 to 5-21, 6-50 to 6-53, 7-32 to 7-35 2-15 to 2-16, 3-11 to 3-12, 4-35 to 4-36, 5-16 to 5-19, 6-17 to 6-18, 7-12 to 7-15 1-12 to 1-15, 3-36 to 3-37, 4-31 to 4-32, 5-16 to 5-19 1-16 to 1-17
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.2 Temporal Boundaries	As is the case for the determination of spatial boundaries, the temporal boundaries must indicate the range of appropriate scales at which particular baseline descriptions and the assessment of environmental effects are presented.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.4 X.4 X.4 X.4 X.4 1.2.3.2	-	1-12 to 1-15, 2-8 to 2-11 4-25 to 4-26, 5-80 to 5-83, 6-32 to 6-35, 7-16 to 7-19, 8-29 to 8-30, 9-29 to 9-30, 10-18 to 10-21 1-34 to 1-41, 4-32 to 4-35, 5-18 to 5-21, 6-50 to 6-53, 7-32 to 7-35 2-15 to 2-16, 3-11 to 3-12, 4-35 to 4-36, 5-16 to 5-19, 6-17 to 6-18, 7-12 to 7-15 1-12 to 1-15, 3-36 to 3-37, 4-31 to 4-32, 5-16 to 5-19 1-16 to 1-17
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.2 Temporal Boundaries	For all temporal boundaries, the EIS shall give a rationale and justification for the boundaries chosen, including a description of any consultation with members of the public or technical experts. In doing so, the Proponent shall give consideration to climate change, including warming trends, which might influence some of the impact assessment. This may include, for example, where there may be no immediate danger of permafrost degradation, but taking climate change into consideration would have the Proponent incorporate the future possibility of this risk into the discussion of Project design where applicable.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.4 X.4 X.4 X.4 X.4 1.2.3.2	-	1-12 to 1-15, 2-8 to 2-11 4-25 to 4-26, 5-80 to 5-83, 6-32 to 6-35, 7-16 to 7-19, 8-29 to 8-30, 9-29 to 9-30, 10-18 to 10-21 1-34 to 1-41, 4-32 to 4-35, 5-18 to 5-21, 6-50 to 6-53, 7-32 to 7-35 2-15 to 2-16, 3-11 to 3-12, 4-35 to 4-36, 5-16 to 5-19, 6-17 to 6-18, 7-12 to 7-15 1-12 to 1-15, 3-36 to 3-37, 4-31 to 4-32, 5-16 to 5-19 1-16 to 1-17

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.5 ASSESSMENT BOUNDARIES	7.5.2 Temporal Boundaries	The Proponent shall also give due consideration to traditional and contemporary land use and occupancy (past, present, and future), in addition to other factors to be considered in its determination of temporal boundaries for the Project.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.2, X.4, X.5.1, X.6.1 X.2, X.4, X.5.1, X.6.1 X.2, X.4, X.5.1, X.6.1 X.2, X.4, X.5.1, X.6.1 X.2, X.4, X.5.1, X.6.1 1.2.3.2, 1.3.4.3	-	1-10 to 1-15, 1-28, 2-7 to 2-11, 2-33 to 2-35 4-25 to 4-26, 4-63, 5-80 to 5-85, 5-114 to 5-116, 6-32 to 6-37, 6-62 to 6-64, 7-16 to 7-21, 7-45 to 7-47, 8-29 to 8-34, 5-65 to 8-67, 9-29 to 9-35, 9-54 to 9-56, 10-18 to 10-24, 10-48 to 10-50 1-32 to 1-44, 1-51 to 1-52, 4-30 to 4-36, 4-56 to 4-58, 5-17 to 5-23, 5-39 to 5-40, 6-46 to 6-54, 6-67, 7-28 to 7-35, 7-44 2-14 to 2-20, 2-39, 3-10 to 3-17, 3-29 to 3-31, 4-30 to 4-33, 4-35 to 4-39, 4-43, 5-12 to 5-19, 5-25, 6-13 to 6-22, 6-35 to 6-38, 7-7 to 7-10, 7-12 to 7-17, 7-36 1-11 to 1-16, 1-32 to 1-33, 3-22 to 3-24, 3-36 to 3-41, 3-92 to 3-98, 4-21 to 4-25, 4-31 to 4-36, 4-58 to 4-64, 5-12 to 5-19, 5-43 1-16 to 1-17, 1-44 to 1-45
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS		The EIS shall include a clear listing of those VECs and VSECs, processes, and interactions between the VECs and VSECs that are likely to be affected by the Project as well as those identified in these Guidelines.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.2 X.5.2 X.5.2 X.5.2 X.5.2 1.2.3.1	Exception: X.5.3 for Volume 8 Chapter 3	1-19 to 1-25, 2-13 to 2-28 4-28 to 4-31, 5-85 to 5-108, 6-37 to 6-56, 7-21 to 7-40, 8-34 to 8-58, 9-35 to 9-50, 10-24 to 10-43 1-44, 4-38 to 4-46, 5-24 to 5-30, 6-54 to 6-63, 7-36 to 7-39 2-20 to 2-26, 3-17 to 3-22, 4-39 to 4-41, 5-20 to 5-22 1-16 to 1-28, 3-43 to 3-83, 4-36 to 4-51, 5-21 to 5-26 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS		If relevant, the location of these VECs/VSECs should be indicated on maps or charts, indicating to whom these components are valued and the reasons why, including ecosystemic, social, economic, recreational, tourism, aesthetic or other considerations.	4, 5, 6 ,7, 8	All	X.1	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS		The Proponent should also indicate the specific geographical areas or ecosystems that are of particular concern, and their relation to the broader regional environment and economy.	4, 5, 6, 7, 8	All	X.1	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS		The Proponent shall explain and justify methods used to predict potential adverse and beneficial effects of the Project on each VEC and VSEC, the interactions among these components, and the relations of these components with the environment. In particular, the Proponent must describe how the VECs were selected and what methods were used to predict and assess the adverse environmental effects of the Project on these components. The value of a component should be considered not only in relation to its role in the ecosystem as a VEC, but also the value placed on it by humans for traditional use and cultural connection as a VSEC. This should be considered not only for components of the environment but also the land directly affected by the Project.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.2 X.5.1, X.5.2 X.5.1, X.5.2 X.5.1, X.5.2 X.5.1, X.5.2 1.2.3.1	-	1-15 to 1-25, 2-11 to 2-28 4-26 to 4-31, 5-83 to 5-108, 6-35 to 6-56, 7-19 to 7-40, 8-30 to 8-57, 9-30 to 9-50, 10-21 to 10-43 1-41 to 1-44, 4-35 to 4-46, 5-21 to 5-30, 6-53 to 6-63, 7-35 to 7-39 2-16 to 2-26, 3-12 to 3-22, 4-36 to 4-41, 5-19 to 5-22, 6-18 to 6-32, 7-15 to 7-34 1-15 to 1-28, 3-37 to 3-43, 3-83 to 3-86, 4-32 to 4-51, 5-19 to 5-26 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS		The Proponent shall provide a rationale for the selection of communities and relevant studies for which baseline data relating to or supporting the discussion and analysis of VECs and VSECs are provided.	8	3, 4	3.1, 3.4, 3.5.3, 4.1, 4.4, 4.5.3	-	3-1 to 3-22, 3-36 to 3-37, 3-43 to 3-83, 4-1 to 4-21, 4-31 to 4-32, 4-41 to 4-53
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS		The Proponent must validate the selected VECs/VSECs, especially those VECs/VSECs that will be used to assess the significance of Project component interactions, through consultation with the potentially affected communities. Any uncertainties in the validation must be documented. (The NIRB strongly recommends that the Proponent continue to seek input from communities, government agencies and other parties, as well as to incorporate the use of TK to identify the VECs and VSECs.)	3 4 5 6 7 8 9	1, 3 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	1.6.2.2, 3.3.2 X.5.1, X.5.2 X.5.1, X.5.2 X.5.1, X.5.2 X.5.1, X.5.2 X.5.1, X.5.2 1.2.3.1	-	1-35 to 1-36, 3-40 1-15 to 1-25, 2-11 to 2-28 4-26 to 4-31, 5-83 to 5-108, 6-35 to 6-56, 7-19 to 7-40, 8-30 to 8-57, 9-30 to 9-50, 10-21 to 10-43 1-41 to 1-44, 4-35 to 4-46, 5-21 to 5-30, 6-53 to 6-63, 7-35 to 7-39 2-16 to 2-26, 3-12 to 3-22, 4-36 to 4-41, 5-19 to 5-22, 6-18 to 6-32, 7-15 to 7-34 1-15 to 1-28, 3-37 to 3-43, 3-83 to 3-86, 4-32 to 4-51, 5-19 to 5-26 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS		All VECs and VSECs used in the assessment should have clearly identified indicators as outlined in Section 7.13.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5.1, X.5.2	-	1-15 to 1-25, 2-11 to 2-28 4-26 to 4-31, 5-83 to 5-108, 6-35 to 6-56, 7-19 to 7-40, 8-30 to 8-57, 9-30 to 9-50, 10-21 to 10-43 1-41 to 1-44, 4-35 to 4-46, 5-21 to 5-30, 6-53 to 6-63, 7-35 to 7-39 2-16 to 2-26, 3-12 to 3-22, 4-36 to 4-41, 5-19 to 5-22, 6-18 to 6-32, 7-15 to 7-34 1-15 to 1-28, 3-37 to 3-43, 3-83 to 3-86, 4-32 to 4-51, 5-19 to 5-26
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS		The Proponent is expected to identify the components and activities of the Project that are anticipated to interact in adverse or beneficial ways with the selected VECs/VSECs and the interaction. These components and activities could be grouped into the following categories:				-	
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS		i. Components and activities related to construction, operation, temporary closure, final closure and post-closure of the Project, and	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.2 X.5.2 X.5.2 X.5.2 X.5.2 1.2.4.1	Exception: X.5.3 for Volume 8 Chapter 3	1-19 to 1-25, 2-13 to 2-28 4-28 to 4-31, 5-85 to 5-108, 6-37 to 6-56, 7-21 to 7-40, 8-34 to 8-58, 9-35 to 9-50, 10-24 to 10-43 1-44, 4-38 to 4-46, 5-24 to 5-30, 6-54 to 6-63, 7-36 to 7-39 2-20 to 2-26, 3-17 to 3-22, 4-39 to 4-41, 5-20 to 5-22 1-16 to 1-28, 3-43 to 3-83, 4-36 to 4-51, 5-21 to 5-26 1-18

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS		ii. Components and activities induced by the Project development, which may occur in the reasonably foreseeable future.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.2 X.5.2 X.5.2 X.5.2 X.5.2 1.2.4.1	Exception: X.5.3 for Volume 8 Chapter 3	1-19 to 1-25, 2-13 to 2-28 4-28 to 4-31, 5-85 to 5-108, 6-37 to 6-56, 7-21 to 7-40, 8-34 to 8-58, 9-35 to 9-50, 10-24 to 10-43 1-44, 4-38 to 4-46, 5-24 to 5-30, 6-54 to 6-63, 7-36 to 7-39 2-20 to 2-26, 3-17 to 3-22, 4-39 to 4-41, 5-20 to 5-22 1-16 to 1-28, 3-43 to 3-83, 4-36 to 4-51, 5-21 to 5-26 1-18
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS		The Proponent should consider the following list in the selection of VECs and VSECs (this list is not meant to be comprehensive nor exhaustive, abut should give the Proponent an appropriate starting point for the identification of relevant VECs and VSECs):	-	-	-	-	-
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	i. Air quality,	4 9	1 1	1.3.2 1.2.3.1	-	1-11 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	ii. Climate and Meteorology,	4 9	3 1	3.3.2 1.2.3.1	-	3-17 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	iii. Noise and vibration,	4 9	2 1	2.3.2 1.2.3.1	-	2-7 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	iv. Terrestrial environment, including terrestrial ecology, landforms and soils, and permafrost and ground stability,	5 9	2, 3, 4 1	2.3, 3.3, 4.3 1.1, 1.2, 1.3, 1.4	-	1-13, 3-33, 4-19 to 4-25 1-1 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	v. Geological features including discussion of surficial and bedrock geology and geochemistry,	5 9	1 1	1.3 1.1, 1.2, 1.3, 1.4	-	1-13 1-1 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	vi. Hydrological features (including water quantity) and discussion of hydrogeology,	6 9	1, 2 1	1.3, 2.3 1.1, 1.2, 1.3, 1.4	-	1-33 to 1-34, 2-30 1-1 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	vii. Groundwater and surface water quality,	6 9	2, 4 1	2.3, 4.3 1.1, 1.2, 1.3, 1.4	-	2-30, 4-31 to 4-32 1-1 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	viii. Sediment quality,	6 9	5 1	5.3 1.1, 1.2, 1.3, 1.4	-	5-18 1-1 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	ix. Freshwater aquatic environment, including aquatic ecology, aquatic biota (including representative fish as defined in the Fisheries Act, benthic invertebrates, and other aquatic organisms), habitat (including fish habitat as defined in the Fisheries Act), and commercial, recreational and Aboriginal fisheries as defined in the Fisheries Act,	6 9	3, 4, 5, 6, 7 1	3.3, 4.3, 5.3, 6.3, 7.3 1.1, 1.2, 1.3, 1.4	-	3-33, 4-19 to 4-25, 5-18, 6-49 to 6-50, 7-31 1-1 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	x. Vegetation,	5 9	4 1	4.3 1.1, 1.2, 1.3, 1.4	-	4-19 to 4-25 1-1 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	xi. Terrestrial wildlife and wildlife habitat (including representative terrestrial mammals to include caribou, caribou habitat and behaviour, muskoxen, wolverine, polar bears, brown bears (including both brown and grizzly), wolves, and less conspicuous species that may be maximally exposed to contaminants), and wildlife migration routes and crossings,	5 9	5, 6, 7, 8 1	5.3, 6.3, 7.3, 8.3 1.1, 1.2, 1.3, 1.4	-	5-77 to 5-79, 6-30 to 6-31, 7-15, 8-28 to 8-29 1-1 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	xii. Birds and their habitat including raptors, migratory birds, and seabirds,	5 7 9	9, 10 6 1	9.3, 10.3 6.3 1.1, 1.2, 1.3, 1.4	-	9-28 to 9-29, 10-17 to 10-18 6-16 to 6-17 1-1 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	xiii. Marine environment, including marine ecology, marine water and sediment quality, marine biota (including fish and Species at Risk), marine habitat, and commercial, recreational and Aboriginal fisheries as defined in the Fisheries Act, and	7 9	1, 2, 3, 4, 5 1	X.3 1.2.3.1	-	1-32, 2-15, 3-11, 4-33 to 4-35, 5-14 to 5-16 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.1 Valued Ecosystem Components	xiv. Marine wildlife, including marine mammals such as whales and seals.	7 9	6, 7 1	6.3, 7.3 1.2.3.1	-	6-16 to 6-17, 7-11 to 7-12 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.2 Valued Socio-Economic Components	i. Economic development and opportunities,	8 9	3 1	3.3 1.2.3.1	-	3-24 to 3-36 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.2 Valued Socio-Economic Components	ii. Employment,	8 9	3 1	3.3 1.2.3.1	-	3-24 to 3-36 1-4 to 1-16

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.2 Valued Socio-Economic Components	iii. Education and training,	8 9	3 1	3.3 1.2.3.1	-	3-24 to 3-36 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.2 Valued Socio-Economic Components	iv. Contracting and business opportunities,	8 9	3 1	3.3 1.2.3.1	-	3-24 to 3-36 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.2 Valued Socio-Economic Components	v. Population demographics,	8 9	3 1	3.3 1.2.3.1	-	3-24 to 3-36 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.2 Valued Socio-Economic Components	vi. Traditional activity and knowledge including land use and mobility, food security, language, and cultural and commercial harvesting,	3 8 9	3 4 1	3.3.2 4.3 1.2.3.1	-	3-40 4-25 to 4-30 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.2 Valued Socio-Economic Components	vii. Non-traditional land use and resource use,	8 9	4 1	4.3 1.2.3.1	-	4-26 to 4-31 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.2 Valued Socio-Economic Components	viii. Heritage resources including archaeology, palaeontology, and cultural resources,	8 9	1, 2 1	1.3, 2.3 1.2.3.1	-	1-12, 2-7 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.2 Valued Socio-Economic Components	ix. Health and well-being including individual and community wellness, family and community cohesion, and potential indirect effects of project on frequency and types of crime incidents,	8 9	3 1	3.3 1.2.3.1	-	3-26 to 3-35 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.2 Valued Socio-Economic Components	x. Community infrastructure and public service, including housing, and	8	3 1	3.3 1.2.3.1	-	3-26 to 3-35 1-4 to 1-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.6 VALUED ECOSYSTEM AND SOCIO-ECONOMIC COMPONENTS	7.6.2 Valued Socio-Economic Components	xi. Health and safety including worker and public safety.	8 10	6 5	6.3, 6.4 All	-	6-18 to 6-157 All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY		In describing the study methodologies, the Proponent shall explain how scientific, engineering, traditional, community, and any other knowledge was used to construct its studies and reach its conclusions.	3 4 5 6 7 8	1, 3 All All All All All	1.6.1, 3.2 X.1, X.2 X.1, X.2 X.1, X.2 X.1, X.2 X.1, X.2	-	1-34 to 1-35, 3-34 to 3-39 1-1 to 1-11, 2-1 to 2-7, 3-1 to 3-1 to 3-17 1-1 to 1-13, 2-1 to 2-28, 3-1 to 3-33, 4-1 to 4-19, 5-1 to 5-77, 6-1 to 6-30, 7-1 to 7-15, 8-1 to 8-28, 9-1 to 9-28, 10-1 to 10-17 1-1 to 1-33, 2-1 to 2-30, 3-1 to 3-18, 4-1 to 4-31, 5-1 to 5-18, 6-1 to 6-49, 7-1 to 7-31 1-1 to 1-32, 2-1 to 2-15, 3-1 to 3-11, 4-1 to 4-33, 5-1 to 5-15, 6-1 to 6-16, 7-1 to 7-11 1-1 to 1-12, 2-1 to 2-2, 3-1 to 3-24, 4-1 to 4-25, 5-1 to 5-15, 6-1 to 6-18
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY		The Proponent shall identify and justify all assumptions and substantiate all conclusions presented.	4, 5, 6, 7, 8	All	All	-	All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY		All data, models, and studies must be documented so that the analyses are transparent and reproducible.	4, 5, 6, 7, 8	All	All	-	All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY		All data collection methods shall be specified, and the uncertainty, reliability and sensitivity of methods and models used to reach conclusions shall also be indicated.	4, 5, 6, 7, 8	All	All	-	All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY		Where any study is presented as an independent appendix in the EIS, the Proponent should also provide an overview of the study in the main document, including the methodology used, assumptions made, interpretation of the results, limitations, and provide appropriate cross-referencing to the specific study as necessary.	2, 3, 4, 5, 6, 7, 8, 9, 10 11, 12	All	All	-	All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY		To support the main conclusions presented in its EIS, the Proponent shall broadly identify significant gaps of knowledge and understanding, the steps taken by the Proponent to address these gaps, and how these gaps impacted those conclusions.	2, 3, 4, 5, 6, 7, 8	All	All	-	All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY		Where the conclusions drawn from scientific and technical knowledge are in conflict with the conclusions drawn from community and/or TK sources, the EIS shall contain a balanced presentation of the issues and a statement of the Proponent's conclusions.	3 4, 5, 6, 7, 8	3 All	3.3.5 All	-	3-42 All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY	7.7.1 Acquisition Methodology and Documentation	The Proponent shall specify and justify all sampling protocols and statistical processes employed in both the biophysical and social contexts.	4, 5, 6, 7, 8	All	All	-	All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY	7.7.1 Acquisition Methodology and Documentation	The scope and reliability of the results, the possibility of reproducing the analyses, and quality control of laboratory analyses shall be analyzed. All data that is based on environmental sampling involves some variability, which must be determined in order to assess the scope and reliability of the data.	4, 5, 6, 7, 8	All	All	-	All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY	7.7.1 Acquisition Methodology and Documentation	The Proponent shall specify and justify all sampling protocols and statistical processes employed in both the biophysical and social context.	4, 5, 6, 7, 8	All	All	-	All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY	7.7.1 Acquisition Methodology and Documentation	The reliability and scope of the results, the possibility of reproducing the analyses, and quality control of laboratory analyses shall be analyzed.	4, 5, 6, 7, 8	All	All	-	All

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY	7.7.1 Acquisition Methodology and Documentation	The Proponent shall, for all data obtained from environmental sampling, provide a dispersion or variability coefficient (variance, standard deviation, confidence interval, etc.) and justification for sample size used.	4 5 6 7 8	All	X.1	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY	7.7.1 Acquisition Methodology and Documentation	When designing data collection or baseline studies, it is recommended that the Proponent coordinate its programs with relevant developments, government organizations, regional authorities, and researchers, as the design of any study or collection of data may be relevant to ongoing programs established or supported by the Nunavut General Monitoring Program (NGMP), as per Section 12.7.6 of the NLCA.	4 5 6 7 8	All	X.1	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY	7.7.2 Data Analysis and Presentation	Use of qualitative criteria to describe the environment, compare various design and development options, or assess impacts, requires each criteria to be defined, their relative importance stated, and the differences between the categories (e.g. desirable, acceptable, unacceptable) indicated and justified.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5.1	-	1-15 to 1-19, 2-11 to 2-13 4-26 to 4-28, 5-83 to 5-85, 6-35 to 6-37, 7-19 to 7-21, 8-30 to 8-34, 9-30 to 9-35, 10-21 to 10-24 1-41, 4-35 to 4-38, 5-21 to 5-24, 6-53 to 6-54, 7-35 to 7-36 2-16 to 2-20, 3-12 to 3-17, 4-36 to 4-39, 5-19 to 5-20, 6-18 to 6-22, 7-15 to 7-17 1-15 to 1-16, 3-37 to 3-41, 4-32 to 4-36, 5-19 to 5-21
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY	7.7.2 Data Analysis and Presentation	The Proponent shall corroborate all analyses, interpretations of results, and conclusions with a review of relevant literature, providing direct references with an indication of their public availability.	4, 5, 6, 7, 8	All	All	-	All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY	7.7.2 Data Analysis and Presentation	Any TK references shall be indicated and sources identified, or referenced appropriately in cases where TK proprietary or confidentiality concerns exist.	3 4 5 6 7 8	3 All All All All All	3.1, 3.2, 3.3, Appendices V3-3A, V3-3B X.2 X.2 X.2 X.2 X.2	Volume 3 Chapter 3, Table 3.1-1	3-1 to 3-42, Appendices V3-3A, V3-3B 1-10 to 1-11, 2-6 to 2-7, 3-16 to 3-17 1-12 to 1-13, 2-27 to 2-28, 3-21 to 3-33, 4-17 to 4-19, 5-74 to 5-77, 6-20 to 6-30, 7-13 to 7-15, 8-23 to 8-28, 9-25 to 9-28, 10-15 to 10-17 1-32 to 1-33, 2-28 to 2-30, 3-17 to 3-18, 4-30 to 4-31, 5-17 to 5-18, 6-46 to 6-49, 7-28 to 7-31 1-31 to 1-32, 2-14 to 2-15, 3-10 to 3-11, 4-30 to 4-33, 5-12 to 5-15, 6-13 to 6-16, 7-7 to 7-11 1-11 to 1-12, 2-2, 3-22 to 3-24, 4-21 to 4-25, 5-12 to 5-15, 6-13 to 6-18
7.0 IMPACT ASSESSMENT METHODOLOGY	7.7 STUDY STRATEGY AND METHODOLOGY	7.7.2 Data Analysis and Presentation	The Proponent shall correlate its conclusions about impact significance with relevant guidelines or regional policies, discussing, with direct references, any thresholds referred to or adopted from these documents.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5.1, X.5.5, X.10	-	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-33, 2-37 4-26 to 4-28, 4-60 to 4-62, 4-71, 5-83 to 5-85, 5-114, 5-155, 6-35 to 6-37, 6-61 to 6-62, 6-83, 7-19 to 7-21, 7-45, 7-66, 8-30 to 8-34, 8-65, 8-94, 9-30 to 9-35, 9-54, 9-62, 10-21 to 10-24, 10-48, 10-55 1-41 to 1-44, 1-49 to 1-51, 1-53, 4-35 to 4-38, 4-56, 4-62, 5-21 to 5-24, 5-39, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44, 7-50 2-16 to 2-20, 2-37 to 2-39, 2-44, 3-12 to 3-17, 3-29, 3-35, 4-36 to 4-39, 4-43, 4-46, 5-19 to 5-20, 5-25, 5-31, 6-18 to 6-22, 6-35, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-32, 1-35, 3-37 to 3-41, 3-86 to 3-88, 3-115, 4-32 to 4-36, 4-55 to 4-58, 4-80, 5-19 to 5-21, 5-43, 5-44
7.0 IMPACT ASSESSMENT METHODOLOGY	7.8 IMPACT ASSESSMENT APPROACH		The required impact assessment, including the significance analysis, shall describe the effect considered, the significance of the effect and justification for that determination, and how the effect fits into a cumulative effects analysis and transboundary effects analysis. In this assessment, emphasis shall be placed on significant impacts to VECs and VSECs and the interactions between VECs and VSECs, extending across all Project phases as applicable.	1 4 5 6 7 8	Executive Summary, 5, 8, 12 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	All X.5, X.6, X.7 X.5, X.6, X.7 X.5, X.6, X.7 X.5, X.6, X.7 X.5, X.6, X.7	-	All 1-15 to 1-29, 2-11 to 2-35 4-26 to 4-62, 5-114 to 5-147, 6-35 to 6-76, 7-19 to 7-61, 8-30 to 8-88, 9-30 to 9-56, 10-21 to 10-50 1-41 to 1-52, 4-35 to 4-58, 5-21 to 5-41, 6-53 to 6-67, 7-35 to 7-46 2-16 to 2-40, 3-12 to 3-31, 4-36 to 4-43, 5-19 to 5-27, 6-18 to 6-44, 7-15 to 7-36 1-15 to 1-33, 3-37 to 3-110, 4-32 to 4-77, 5-19 to 5-43
7.0 IMPACT ASSESSMENT METHODOLOGY	7.8 IMPACT ASSESSMENT APPROACH		The biophysical elements and socio-economic elements potentially impacted by the Project components, activities and undertakings shall be referred to in the categories listed in Section 8.0. Based on the predicted potential adverse effects, the proposed mitigation measures shall be addressed in the main document following the relevant impact assessment of each VEC, and cross referenced to the specific management plan where detailed information is located as listed in Section 9.0.	1 4 5 6 7 8	Executive Summary, 5, 8, 12 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	All X.5.3, X.8 X.5.3, X.8 X.5.3, X.8 X.5.3, X.8 X.5.3, X.8	-	All 1-25 to 1-26, 1-29 to 1-30, 2-28 to 2-32, 2-35 to 2-36 4-31 to 4-33, 4-68 to 4-70, 5-108 to 5-112, 5-147 to 5-153, 6-56 to 6-59, 6-76 to 6-81, 7-40 to 7-43, 7-61 to 7-65, 8-58 to 8-62, 9-88 to 8-92, 9-50 to 9-52, 9-56 to 9-60, 10-43 to 10-45, 10-50 to 10-54 1-44 to 1-45, 1-52 to 1-53, 4-46 to 4-53, 4-58, 5-30 to 5-36, 5-41 to 5-45, 6-63 to 6-67, 6-67 to 6-71, 7-39 to 7-44, 7-46 to 7-49 2-26 to 2-34, 2-40 to 2-43, 3-22 to 3-27, 3-31, 4-41 to 4-43, 5-22 to 5-25, 5-27 to 5-31, 6-32 to 6-34, 6-44 to 6-49, 7-34 to 7-40 1-28 to 1-30, 1-33 to 1-34, 3-43 to 3-83, 3-110 to 3-113, 4-51 to 4-53, 4-77 to 4-79, 5-26 to 5-31, 5-43

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.8 IMPACT ASSESSMENT APPROACH		The impact assessment for each biophysical and socio-economic element can be linked to a list of project components and activities deemed responsible for the potential impacts. Vice versa, a project component or activity can also be linked to various environment elements, in particular VECs and VSECs, on which it might potentially have impacts. A matrix or a comparable tool should be employed to identify all linkages between environmental elements, project components and activities and potential impacts, highlighting significant interactions between them.	4 5 6 7 8 10	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 2	X.5.2 X.5.2 X.5.2 X.5.2 X.5.2 1.2.4.2	Exception: X.5.3 for Volume 8 Chapter 4	1-19 to 1-25, 2-13 to 2-28 4-28 to 4-31, 5-85 to 5-108, 6-37 to 6-56, 7-21 to 7-40, 8-34 to 8-58, 9-35 to 9-50, 10-24 to 10-43 1-44, 4-38 to 4-46, 5-24 to 5-30, 6-54 to 6-63, 7-36 to 7-39 2-20 to 2-26, 3-17 to 3-22, 4-39 to 4-41, 5-20 to 5-22 1-16 to 1-28, 3-43 to 3-83, 4-36 to 4-51, 5-21 to 5-26 1-18
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		The Proponent shall explain and justify the methods used for impact prediction, including: mathematical or numerical modeling, statistical modeling (e.g. variance and correlation analyses), analysis of sequential series, expert opinion, previous experiences, and the prediction from known tendencies and TK if applicable.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5.1, X.6.1	-	1-15 to 1-19, 1-26, 1-28, 2-11 to 2-13, 2-32 to 2-35 4-26 to 4-28, 4-63, 5-83 to 5-85, 5-114 to 5-119, 6-35 to 6-37, 6-62 to 6-64, 7-19 to 7-21, 7-45 to 7-48, 8-30 to 8-34, 8-65 to 8-68, 9-30 to 9-35, 9-54 to 9-56, 10-21 to 10-24, 10-48 to 10-50 1-41, 1-51 to 1-52, 4-35 to 4-38, 4-56 to 4-58, 5-21 to 5-24, 5-39 to 5-41, 6-53 to 6-54, 6-67, 7-35 to 7-36, 7-44 2-16 to 2-20, 2-39, 3-12 to 3-17, 3-29 to 3-31, 4-36 to 4-39, 4-43, 5-19 to 5-20, 5-25, 6-18 to 6-22, 6-35 to 6-38, 7-15 to 7-17, 7-36 1-15 to 1-16, 1-32 to 1-33, 3-37 to 3-41, 3-98, 4-32 to 4-36, 4-58 to 4-64, 5-19 to 5-21, 5-43
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		All studies used in the prediction of impacts must be specified, the original authors identified, and the studies made public.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	All	-	1-1 to 1-30, 2-1 to 2-37 4-1 to 4-71, 5-1 to 5-155, 6-1 to 6-83, 7-1 to 7-66, 8-1 to 8-94, 9-1 to 9-61, 10-1 to 10-55 1-1 to 1-53, 4-1 to 4-63, 5-1 to 5-45, 6-1 to 6-72, 7-1 to 7-50 1-1 to 1-35, 3-1 to 3-115, 4-1 to 4-80, 5-1, to 5-44
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		All statements based on public consultation shall be justified and the sources and methodology specified.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	All	-	1-1 to 1-30, 2-1 to 2-37 4-1 to 4-71, 5-1 to 5-155, 6-1 to 6-83, 7-1 to 7-66, 8-1 to 8-94, 9-1 to 9-61, 10-1 to 10-55 1-1 to 1-53, 4-1 to 4-63, 5-1 to 5-45, 6-1 to 6-72, 7-1 to 7-50 1-1 to 1-35, 3-1 to 3-115, 4-1 to 4-80, 5-1, to 5-44
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		The choice of methodologies and interpretation of results shall be justified in light of current theories, knowledge and standards.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.6.1 X.5.1, X.6.1 X.5.1, X.6.1 X.5.1, X.6.1 X.5.1, X.6.1 1.2, 1.3	-	1-1 to 1-30, 2-1 to 2-37 4-1 to 4-71, 5-1 to 5-155, 6-1 to 6-83, 7-1 to 7-66, 8-1 to 8-94, 9-1 to 9-61, 10-1 to 10-55 1-1 to 1-53, 4-1 to 4-63, 5-1 to 5-45, 6-1 to 6-72, 7-1 to 7-50 1-1 to 1-35, 3-1 to 3-115, 4-1 to 4-80, 5-1, to 5-44 1-2 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		The Proponent shall assess the direct, indirect, short-term, and long-term impacts of the Project on the biophysical and socio-economic environments, and the interactions between them, focusing on the anticipated response of the VECs and VSECs.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	All	-	All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		The Proponent shall also assess the degree of uncertainty associated with each predicted effect. Where potential cumulative effects are identified, a discussion should be provided related to the CEA as outlined in Section 7.11 of these Guidelines.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.6.1 X.5.1, X.6.1 X.5.1, X.6.1 X.5.1, X.6.1 X.5.1, X.6.1 1.3	-	1-15 to 1-19, 1-28, 2-11 to 2-13, 2-32 to 2-35 4-26 to 4-28, 4-63, 5-83 to 5-85, 5-114 to 5-119, 6-35 to 6-37, 6-62 to 6-64, 7-19 to 7-21, 7-45 to 7-48, 8-30 to 8-34, 8-65 to 8-68, 9-30 to 9-35, 9-54 to 9-56, 10-21 to 10-24, 10-48 to 10-50 1-41, 1-51 to 1-52, 4-35 to 4-38, 4-56 to 4-58, 5-21 to 5-24, 5-39 to 5-41, 6-53 to 6-54, 6-67, 7-35 to 7-36, 7-44 2-16 to 2-20, 2-39, 3-12 to 3-17, 3-29 to 3-31, 4-36 to 4-39, 4-43, 5-19 to 5-20, 5-25, 6-18 to 6-22, 6-35 to 6-38, 7-15 to 7-17, 7-36 1-15 to 1-16, 1-32 to 1-33, 3-37 to 3-41, 3-98, 4-32 to 4-36, 4-58 to 4-64, 5-19 to 5-21, 5-43 1-33 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		The Proponent shall identify potential impacts resulting from each Project phase, including impacts arising from accidental events and malfunctions, with accepted practices used to draw impact predictions.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 3	X.5.1, X.5.2, X.6.1 X.5.1, X.5.2, X.6.1 X.5.1, X.5.2, X.6.1 X.5.1, X.5.2, X.6.1 X.5.1, X.5.2, X.6.1 All	-	1-15 to 1-25, 1-28, 2-11 to 2-28, 2-33 to 2-35 4-26 to 4-31, 4-63, 5-83 to 5-108, 5-114 to 5-119, 6-35 to 6-56, 6-62 to 6-64, 7-19 to 7-40, 7-45 to 7-48, 8-30 to 8-57, 8-65 to 8-68, 9-30 to 9-50, 6-54 to 9-56, 10-21 to 10-43, 10-50 1-41 to 1-44, 1-51 to 1-52, 4-35 to 4-46, 4-56 to 4-58, 5-21 to 5-30, 5-39 to 5-41, 6-53 to 6-63, 6-67, 7-35 to 7-39, 7-44 2-16 to 2-26, 2-39, 3-12 to 3-22, 3-29 to 3-31, 4-36 to 4-41, 4-43, 5-19 to 5-22, 5-25, 6-18 to 6-32, 6-35 to 6-38, 7-15 to 7-34, 7-36 1-15 to 1-28, 1-32 to 1-33, 3-37 to 3-43, 3-83 to 3-86, 3-92 to 3-98, 4-32 to 4-51, 4-64, 5-19 to 5-26, 5-43 All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		Predictions shall be presented with appropriate explanations and justification, and the Proponent shall:	-	-	-	-	-
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		i. Explain how scientific, engineering, community and TK was used,	3 4, 5, 6, 7, 8 9	1, 3 All 1	1.6.2.2, 3.3.2 All 1.2.4	-	1-35 to 1-36, 3-40 All 1-17 to 1-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		ii. Document model assumptions, study methodologies and sensitivity analyses,	4, 5, 6, 7, 8 9	All 1	All 1.2.4	-	All 1-17 to 1-33

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		iii. Document data collection methods and limitations thereof,	4, 5, 6, 7, 8	All	X.1	-	1-1 to 1-10, 2-1 to 2-6, 3-1 to 3-1 to 3-16 1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21, 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-20, 7-1 to 7-13, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-32, 2-1 to 2-28, 3-1 to 3-17, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 1-1 to 1-31, 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-12, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 2-1 to 2-2, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12, 6-1 to 6-13
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		iv. Support analyses, interpretation of results and conclusions with reference to appropriate literature,	4, 5, 6, 7, 8	All	All	-	All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		v. Describe how uncertainty in impact predictions have been dealt with,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.4 X.5.4 X.5.4 X.5.4 X.5.4 1.2.4.4, 1.2.4.5	Exception: X.5.5 for Volume 8 Chapter 3	1-26, 2-32 to 2-33 4-33 to 4-60, 5-112 to 5-114, 6-59 to 6-61, 7-43 to 7-45, 8-62 to 8-65, 9-35 to 9-50, 10-24 to 10-43 1-45 to 1-49, 4-53 to 4-56, 5-36 to 5-39, 6-67, 7-44 2-34 to 2-37, 3-27 to 3-29, 4-43, 5-25, 6-34 to 6-35, 7-36 1-30, 3-86 to 3-88, 4-53 to 4-55, 5-31 to 5-43 1-26 to 1-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		vi. Specify and reference sources for any contributions based on TK,	3 4 5 6 7 8	3 All All All All All	3.1.1, 3.2, 3.3 X.2 X.2 X.2 X.2 X.2	Volume 3 Chapter 3, Table 3.1-1	3-1 , 3-34 to 3-42 1-10 to 1-11, 2-6 to 2-7, 3-16 to 3-17 1-12 to 1-13, 2-27 to 2-28, 3-21 to 3-33, 4-17 to 4-19, 5-74 to 5-77, 6-20 to 6-30, 7-13 to 7-15, 8-23 to 8-28, 9-25 to 9-28, 10-15 to 10-17 1-32 to 1-33, 2-28 to 2-30, 3-17 to 3-18, 4-30 to 4-31, 5-17 to 5-18, 6-46 to 6-49, 7-28 to 7-31 1-31 to 1-32, 2-14 to 2-15, 3-10 to 3-11, 4-30 to 4-33, 5-12 to 5-15, 6-13 to 6-16, 7-7 to 7-11 1-11 to 1-12, 2-2, 3-22 to 3-24, 4-21 to 4-25, 5-12 to 5-15, 6-13 to 6-18
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		vii. Identify which studies included the assistance of communities and individuals, who was involved (if the information can be made public), and how participants were selected,	3 8	1, 3 3, 4	1.5.3, 1.6.1, 3.2 3.1, Appendix V8-3A, 4.1	-	1-21 to 1-35, 3-34 to 3-39 3-1 to 3-22, Appendix V8-3A, 4-1 to 4-21
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		viii. Identify all proposed mitigation measures and adaptive management strategies, if applicable, and	4 5 6 7 8 10	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 All	X.5.3, X.8 X.5.3, X.8 X.5.3, X.8 X.5.3, X.8 X.5.3, X.8 All	-	1-25 to 1-26, 1-29 to 1-30, 2-28 to 2-32, 2-35 to 2-36 4-31 to 4-33, 4-68 to 4-70, 5-108 to 5-112, 5-147 to 5-153, 6-56 to 6-59, 6-76 to 6-81, 7-40 to 7-43, 7-61 to 7-65, 8-58 to 8-62, 9-88 to 8-92, 9-50 to 9-52, 9-56 to 9-60, 10-43 to 10-45, 10-50 to 10-54 1-44 to 1-45, 1-52 to 1-53, 4-46 to 4-53, 4-58, 5-30 to 5-36, 5-41 to 5-45, 6-63 to 6-67, 6-67 to 6-71, 7-39 to 7-44, 7-46 to 7-49 2-26 to 2-34, 2-40 to 2-43, 3-22 to 3-27, 3-31, 4-41 to 4-43, 5-22 to 5-25, 5-27 to 5-31, 6-32 to 6-34, 6-44 to 6-49, 7-34 to 7-40 1-28 to 1-30, 1-33 to 1-34, 3-43 to 3-83, 3-110 to 3-113, 4-51 to 4-53, 4-77 to 4-79, 5-26 to 5-31, 5-43 All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.9 IMPACT PREDICTION		ix. Describe the potential residual effects and explain their significance.	1 4 5 6 7 8 5 7 8	6, 8, 12 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 4, 5, 6, 7, 8 5, 6 1, 3, 4	All X.5.4, X.5.5, X.10 X.5.4, X.5.5, X.10 X.5.4, X.5.5, X.10 X.5.4, X.5.5, X.10 X.5.4, X.5.5, X.10 X.6.4, X.6.5 X.6.4, X.6.5 X.6.4, X.6.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	All 1-26 to 1-28, 1-30, 2-32 to 2-33, 2-37 4-33 to 4-62, 4-71, 5-112 to 5-114, 5-155, 6-59 to 6-62, 6-83, 7-43 to 7-45, 7-66, 8-62 to 8-65, 8-94, 9-35 to 9-50, 9-54, 10-24 to 10-43, 10-48 to 10-55 1-45 to 1-51, 1-53, 4-53 to 4-56, 4-62, 5-36 to 5-39, 5-45, 6-67, 6-72, 7-44, 7-55 2-34 to 2-39, 2-44, 3-27 to 3-29, 3-35, 4-43, 4-46, 5-25, 5-31, 6-34 to 6-35, 6-50 to 6-51, 7-36, 7-42 1-30 to 1-32, 1-35, 3-86 to 3-92, 3-115, 4-53 to 4-58, 4-80, 5-31 to 5-43, 5-44 4-65 to 4-68, 5-145 to 5-147, 6-59 to 6-61, 7-57 to 7-59, 8-83 to 8-88 5-27, 6-34 to 6-35 1-33, 3-101 to 3-106, 4-58 to 4-73
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		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/subsidence and global climate change.	9	2	2.2	-	2-1 to 2-7
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		The discussion on global climate change must describe and assess, on the basis of current knowledge, how potential climate change could affect permafrost and soils with high ice content, the hydrological regime, freshwater and groundwater regimes, and the long-term impacts of such changes on Project infrastructure (i.e., water diversions and impoundment structures, waste water treatment structures, fuel and chemical storage areas, solid waste sites, road structures, waste management facilities, tailings facility, etc.).	5 6 7 9	2, 5, 7, 8, 10 1, 4, 5 6, 7 2	2.1.2.5, 5.5.2.8, 7.5.4.3, 7.6.4.3, 8.6.4.4, 10.5.2.8 1.1.3, 4.1.1, 5.1.1 6.5.2.6, 6.5.4.2, 6.6.2.2, 6.6.4.2, 7.5.2.6 2.11.1, 2.15	-	2-27, 5-107 to 5-108, 7-44 to 7-45, 7-58 to 7-59, 8-86, 10-42 to 10-43 1-26 to 1-32, 4-1, 5-1 6-31 to 6-32, 6-35, 6-40, 6-43 to 6-44, 7-32 to 7-33 2-16, 2-20 to 2-21
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		The Proponent shall identify the Project sensitivity to changes in specific climate-related parameters. The discussion on global climate change should include:	-	-	-	-	-

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		i. Effects of climate on the Project, with a focus on the design and planning of Project components and activities including: access road network and related water crossings, tank farm(s) and storage facilities, open pit mines, underground mines, waste rock stockpiles, ore stockpiles, and tailings impoundment areas,	9	2	2.15	Table 2.15-1	2-20 to 2-21
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		ii. Impacts of extreme meteorological events on the Project, and related considerations for Project design and planning, including, but not limited to, the following: extreme temperature and precipitation events, high winds and waves, ice-ride up and pile-up events, extreme ocean water levels (high and low), and severe fog or white out conditions. Potential changes to the timing of ice formation, active layer thickness, and frequency of storms shall also be taken into consideration,	9	2	2.14	-	2-18 to 2-20
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		iii. Consideration of sea level decline and shoaling caused by emergence/uplift of the land, including potential impacts to port site offloading area design and access, shipping route navigability, safety, and how this is addressed in the design of baseline studies and monitoring plans for relevant project components,	9	2	2.8, 2.9	-	2-14 to 2-15
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		iv. Design and apply multiple scenarios on impacts assessment, where these scenarios span the range of possible future climates, rather than designing and applying a single “best guess” scenario. It is recommended that the range of future climates considered by the Proponent include scenarios used in the Arctic Climate Impact Assessment report (ACIA 2005) as well as those in the relevant Intergovernmental Panel on Climate Change assessments for polar regions (IPCC, 2007),	9	2	2.10.2, 2.10.3	-	2-15 to 2-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		v. Impacts from climate change on sensitive ecosystem features within the terrestrial, freshwater and marine ecosystems,	9 5 7	2 5, 7, 8, 10 6, 7	2.11, 2.12 2.1.2.5, 5.5.2.8, 7.5.4.3, 7.6.4.3, 8.6.4.4, 10.5.2.8 6.5.2.6, 6.5.4.2, 6.6.2.2, 6.6.4.2, 7.5.2.6	-	2-16 to 2-17 2-27, 5-107 to 5-108, 7-44 to 7-45, 7-58 to 7-59, 8-86, 10-42 to 10-43 6-31 to 6-32, 6-35, 6-40, 6-43 to 6-44, 7-32 to 7-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		vi. Predicted effects of climate change on mean and extreme climate parameters, and meteorological phenomena including flooding, storms, etc.,	9	2	2.13	-	2-17 to 2-18
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		vii. Potential effects of climate change on permafrost thawing in the Project area, with discussion of the related implications on the stability of project components (e.g. waste management facilities) and sensitive land features (e.g. Canadian Heritage Rivers, territorial or national parks), including waste management facilities, and	5 9	3 2	3.1.3, 3.1.4 2.4, 2.11.1	Volume 9 Chapter 2, Tables 2.2-1, 2.2-2 and 2.2-3	3-34, to 3-35 2-8, 2-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		viii. Uncertainties related to climate change predictions, and the related effect on other predictions in the EIS, including water quantity and permafrost thawing.	9	2	2.10.3	-	2-16
7.0 IMPACT ASSESSMENT METHODOLOGY	7.10 IMPACTS OF THE ENVIRONMENT ON THE PROJECT		Longer-term effects of climate change must also be discussed up to the projected closure phase of the Project. The sensitivity of the Project to long-term climate variability and effects shall be identified and discussed. The Canadian Environmental Assessment Agency Procedural Guide, “Incorporating Climate Change Considerations in Environmental Assessment: General Guidance for Practitioners” (CEAA, 2003) provides guidance for incorporating climate change considerations into an environmental assessment, and may be useful for the Proponent.	9	2	2.16	-	2-21
7.0 IMPACT ASSESSMENT METHODOLOGY	7.11 CUMULATIVE EFFECTS ASSESSMENT		The Proponent is expected to carry out its CEA with consideration for the following factors:	-	-	-	-	-
7.0 IMPACT ASSESSMENT METHODOLOGY	7.11 CUMULATIVE EFFECTS ASSESSMENT		i. A larger spatial boundary (RSA rather than LSA): This will enable the Proponent to assess the project impacts in relation to other activities (including other projects and exploration) in the geographical region, and implies that spatial assessment boundaries may cross jurisdictional boundaries for a better understanding of additive and interactive pathways of different types of cumulative effects (NIRB, 2007),	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.6, X.7 X.6, X.7 X.6, X.7 X.6, X.7 X.6, X.7 1.3.4.3	-	1-28 to 1-29, 2-33 to 2-35 4-62 to 4-68, 5-114 to 5-147, 6-62 to 6-76, 7-45 to 7-61, 8-65 to 8-88, 9-54 to 9-56, 10-48 to 10-50 1-51 to 1-52, 4-56 to 4-58, 5-39 to 5-41, 6-67, 7-44 to 7-46 2-39 to 2-40, 3-29 to 3-31, 4-43, 5-25 to 5-27, 6-35 to 6-44, 7-36 1-32 to 1-33, 3-92 to 3-109, 4-58 to 4-76, 5-43 1-44 to 1-45
7.0 IMPACT ASSESSMENT METHODOLOGY	7.11 CUMULATIVE EFFECTS ASSESSMENT		ii. A longer temporal scale (as defined in Subsection 7.5.2): This will enable the Proponent to consider all activities from past developments into the present time and the reasonably foreseeable future for a more accurate analysis of variability and significant long-term effects,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.6, X.7 X.6, X.7 X.6, X.7 X.6, X.7 X.6, X.7 1.3.4.3	-	1-28 to 1-29, 2-33 to 2-35 4-62 to 4-68, 5-114 to 5-147, 6-62 to 6-76, 7-45 to 7-61, 8-65 to 8-88, 9-54 to 9-56, 10-48 to 10-50 1-51 to 1-52, 4-56 to 4-58, 5-39 to 5-41, 6-67, 7-44 to 7-46 2-39 to 2-40, 3-29 to 3-31, 4-43, 5-25 to 5-27, 6-35 to 6-44, 7-36 1-32 to 1-33, 3-92 to 3-109, 4-58 to 4-76, 5-43 1-44 to 1-45
7.0 IMPACT ASSESSMENT METHODOLOGY	7.11 CUMULATIVE EFFECTS ASSESSMENT		iii. Alternatives analysis: CEA requires the explicit creation of alternative development scenarios and analysis of potential cumulative effects associated with each option (Greig et al., 2002). Therefore, the Proponent should endeavour to ensure its CEA addresses the alternatives presented under Section 6.4 of these Guidelines,	N/A	N/A	N/A	This will be addressed in detailed design, FEIS	N/A
7.0 IMPACT ASSESSMENT METHODOLOGY	7.11 CUMULATIVE EFFECTS ASSESSMENT		iv. Consideration of effects on VECs and VSECs: An effective CEA will allow the Proponent to more accurately assess how the interaction of impacts from the various Project components and activities, and those from other past, present and reasonably foreseeable projects (including exploration), might impact in a cumulative fashion on selected VECs/VSECs, and	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.6, X.7 X.6, X.7 X.6, X.7 X.6, X.7 X.6, X.7 1.3.4	-	1-28 to 1-29, 2-33 to 2-35 4-62 to 4-68, 5-114 to 5-147, 6-62 to 6-76, 7-45 to 7-61, 8-65 to 8-88, 9-54 to 9-56, 10-48 to 10-50 1-51 to 1-52, 4-56 to 4-58, 5-39 to 5-41, 6-67, 7-44 to 7-46 2-39 to 2-40, 3-29 to 3-31, 4-43, 5-25 to 5-27, 6-35 to 6-44, 7-36 1-32 to 1-33, 3-92 to 3-109, 4-58 to 4-76, 5-43 1-37 to 1-45

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.11 CUMULATIVE EFFECTS ASSESSMENT		v. Evaluation of significance: Effective CEA requires identifying and predicting the likelihood and significance of potential cumulative effects, including direct, indirect and residual impacts. The Proponent shall consider and determine the significance of the cumulative effects using the criteria described in Section 7.14.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.6.1 X.6.1 X.6.1 X.6.1 X.6.1 1.3.5	-	1-28, 2-33 to 2-35 4-63, 5-114 to 5-119, 6-62 to 6-64, 7-45 to 7-47, 8-65 to 8-68, 9-54 to 9-56. 10-48 to 10-50 1-51, 4-56 to 4-57, 5-39 to 5-40, 6-67, 7-44 2-39, 3-29 to 3-30, 4-43, 5-25, 6-35 to 6-38 1-32, 3-92 to 3-97, 4-58 to 4-63 1-45 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.11 CUMULATIVE EFFECTS ASSESSMENT		As per the identified objectives and methodologies for a CEA, the Proponent shall:	-	-	-	-	-
7.0 IMPACT ASSESSMENT METHODOLOGY	7.11 CUMULATIVE EFFECTS ASSESSMENT		i. Justify the environmental components that will constitute the focus of the CEA. The Proponent’s assessment should emphasize the cumulative effects on the main VECs/VSECs that could be affected by the Project,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.6 X.6 X.6 X.6 X.6 1.3	-	1-28 to 1-29, 2-33 to 2-35 4-62 to 4-68, 5-114 to 5-147, 6-62 to 6-76, 7-45 to 7-61, 8-65 to 8-88, 9-54 to 9-56. 10-48 to 10-50 1-51 to 1-52, 4-56 to 4-58, 5-39 to 5-41, 6-67, 7-44 to 7-46 2-39 to 2-40, 3-29 to 3-31, 4-43, 5-25 to 5-27, 6-35 to 6-44, 7-3 1-32 to 1-33, 3-92 to 3-106, 4-58 to 4-73, 5-43 1-33 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.11 CUMULATIVE EFFECTS ASSESSMENT		ii. Present a justification for the spatial and temporal boundaries for the CEA. It should be noted that these boundaries can vary depending on the VECs or VSECs assessed. The Proponent shall give due consideration to the potential for cumulative effects that may be transboundary in nature,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.6.1 X.6.1 X.6.1 X.6.1 X.6.1 1.3.4	-	1-28, 2-33 to 2-35 4-63, 5-114 to 5-119, 6-62 to 6-64, 7-45 to 7-47, 8-65 to 8-68, 9-54 to 9-56. 10-48 to 10-50 1-51, 4-56 to 4-57, 5-39 to 5-40, 6-67, 7-44 2-39, 3-29 to 3-30, 4-43, 5-25, 6-35 to 6-38 1-32, 3-92 to 3-97, 4-58 to 4-63 1-37 to 1-45
7.0 IMPACT ASSESSMENT METHODOLOGY	7.11 CUMULATIVE EFFECTS ASSESSMENT		iii. Discuss and justify the choice of projects, components and selected activities for the CEA. These shall include past activities and projects, those currently being carried out and any reasonably foreseeable project or activity. Activities should not be limited to exploration and mining-related activities but include other factors not related to mining (e.g., wildfires, roads/airstrips developed for non-mining activities, etc.), and	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.6.2 X.6.2 X.6.2 X.6.2 X.6.2 1.3.4	-	1-28, 2-35 4-63 to 4-64, 5-119 to 5-143, 6-64 to 6-73, 7-48 to 7-57, 8-68 to 8-83, 9-56. 10-50 1-51, 4-58, 5-41, 6-67, 7-44 to 7-45 2-39, 3-31, 4-43, 5-25 to 5-26, 6-38 to 6-42 1-33, 3-98 to 3-99, 4-64 to 4-66 1-37 to 1-45
7.0 IMPACT ASSESSMENT METHODOLOGY	7.11 CUMULATIVE EFFECTS ASSESSMENT		iv. Discuss the mitigation measures that are technically and economically feasible, and determine the significance of the cumulative effects. If any impact is identified and verified beyond the Proponent’s sole responsibility or capacity, the Proponent shall make best efforts to identify how its mitigation measures may contribute toward any collective mitigation undertaken by other responsible parties.	5 7 8 9	4, 5, 6, 7, 8 5, 6 1, 3, 4 1	4.6.3, 5.6.3, 6.6.3, 7.6.3, 8.6.3 5.6.3, 6.6.3 1.6.3, 3.6.3, 4.6.3 1.3.5.2	-	4-65, 5-145, 6-74, 7-57, 8-83 5-27, 6-43 1-33, 3-100 to 3-101, 4-67 1-47 to 1-48
7.0 IMPACT ASSESSMENT METHODOLOGY	7.12 TRANSBOUNDARY IMPACTS		For the purpose of the current Guidelines, transboundary impacts (as defined in the Glossary) must be considered, and will include consideration of direct, indirect, and residual effects of the Project activities (occurring within the NSA) that may occur across provincial, territorial, and international boundaries outside of the NSA.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.7 X.7 X.7 X.7 X.7 1.4	-	1-29, 2-35 4-68, 5-147, 6-76, 7-61, 8-88, 9-56. 10-50 1-52, 4-58, 5-41, 6-67, 7-46 2-40, 3-31, 4-43, 5-27, 6-44, 7-36 1-33, 3-106 to 3-109, 4-73 to 4-76, 5-43 1-47 to 1-48
7.0 IMPACT ASSESSMENT METHODOLOGY	7.12 TRANSBOUNDARY IMPACTS		The Proponent shall give due consideration to the potential for transboundary impacts which may be a result from interactions between the effects of the Project in the NSA, and the effects of projects located outside the NSA.	4 5 6 7 8 10	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 2	X.7 X.7 X.7 X.7 X.7 1.4	-	1-29, 2-35 4-68, 5-147, 6-76, 7-61, 8-88, 9-56. 10-50 1-52, 4-58, 5-41, 6-67, 7-46 2-40, 3-31, 4-43, 5-27, 6-44, 7-36 1-33, 3-106 to 3-109, 4-73 to 4-76, 5-43 1-47 to 1-48
7.0 IMPACT ASSESSMENT METHODOLOGY	7.12 TRANSBOUNDARY IMPACTS		The potential for transboundary impacts related to cumulative effects associated with this Project must also be addressed.	4 5 6 7 8 10	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 2	X.7 X.7 X.7 X.7 X.7 1.4	-	1-29, 2-35 4-68, 5-147, 6-76, 7-61, 8-88, 9-56. 10-50 1-52, 4-58, 5-41, 6-67, 7-46 2-40, 3-31, 4-43, 5-27, 6-44, 7-36 1-33, 3-106 to 3-109, 4-73 to 4-76, 5-43 1-47 to 1-48
7.0 IMPACT ASSESSMENT METHODOLOGY	7.12 TRANSBOUNDARY IMPACTS		Where possible, transboundary impacts should be included within the discussion of various VECs and VSECs as such are identified.	4 5 6 7 8 10	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 2	X.7 X.7 X.7 X.7 X.7 1.4	-	1-29, 2-35 4-68, 5-147, 6-76, 7-61, 8-88, 9-56. 10-50 1-52, 4-58, 5-41, 6-67, 7-46 2-40, 3-31, 4-43, 5-27, 6-44, 7-36 1-33, 3-106 to 3-109, 4-73 to 4-76, 5-43 1-47 to 1-48
7.0 IMPACT ASSESSMENT METHODOLOGY	7.12 TRANSBOUNDARY IMPACTS		The Proponent is also required to present an overall discussion of the potential for transboundary impacts, including predictions, impact assessment and proposed mitigation and monitoring plans.	4 5 6 7 8 10	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 2	X.7 X.7 X.7 X.7 X.7 1.4	-	1-29, 2-35 4-68, 5-147, 6-76, 7-61, 8-88, 9-56. 10-50 1-52, 4-58, 5-41, 6-67, 7-46 2-40, 3-31, 4-43, 5-27, 6-44, 7-36 1-33, 3-106 to 3-109, 4-73 to 4-76, 5-43 1-47 to 1-48
7.0 IMPACT ASSESSMENT METHODOLOGY	7.12 TRANSBOUNDARY IMPACTS		Where feasible, the potential for transboundary impacts should be considered for all VECs and VSECs identified by the Proponent. In particular, and without limitation, the Proponent should ensure that the potential for transboundary impacts identified by the Minister of Aboriginal Affairs and Northern Development in his letter referring the Project Proposal to the NIRB for review (December 17, 2012) should be addressed, which included that:	4 5 6 7 8 10	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 2	X.7 X.7 X.7 X.7 X.7 1.4	-	1-29, 2-35 4-68, 5-147, 6-76, 7-61, 8-88, 9-56. 10-50 1-52, 4-58, 5-41, 6-67, 7-46 2-40, 3-31, 4-43, 5-27, 6-44, 7-36 1-33, 3-106 to 3-109, 4-73 to 4-76, 5-43 1-47 to 1-48
7.0 IMPACT ASSESSMENT METHODOLOGY	7.12 TRANSBOUNDARY IMPACTS		i. Impacts associated with the proposed Project infrastructure (including any associated transportation) on wildlife species such as caribou that have a large migration range, and the resulting socio-economic impacts to communities and groups that rely on these wildlife resources,	5 8	5 3	5.6 3.6	-	5-114 to 5-147 3-92 to 3-106

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.12 TRANSBOUNDARY IMPACTS		ii. Impacts to the local, regional and territorial health system of the Northwest Territories as a result of reliance on medical services, and	8	3	3.6	-	3-92 to 3-106
7.0 IMPACT ASSESSMENT METHODOLOGY	7.12 TRANSBOUNDARY IMPACTS		iii. Impacts to employment and business within the region affected by the Project.	8	3	3.6	-	3-92 to 3-106
7.0 IMPACT ASSESSMENT METHODOLOGY	7.13 INDICATORS AND CRITERIA		The Proponent shall identify the indicators and/or criteria selected for assessing the potential impacts of the Project, including any cumulative and transboundary impacts, and shall justify their selection. In doing so, the Proponent shall describe the role played by consultation with members of the public (TK) and technical experts.	3 4 5 6 7 8	1, 2, 3 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	1.6.2, 2.2, 3.3 X.2, X.5, X.6, X.7 X.2, X.5, X.6, X.7 X.2, X.5, X.6, X.7 X.2, X.5, X.6, X.7 X.2, X.5, X.6, X.7	-	1-35 to 1-36, 2-2 to 2-4, 3-39 to 3-42 1-10 to 1-11, 1-15 to 1-29, 2-6 to 2-7, 2-11 to 2-35 4-17 to 4-19, 4-26 to 4-62, 5-74 to 5-77, 5-114 to 5-147, 6-20 to 6-30, 6-35 to 6-76, 7-13 to 7-15, 7-19 to 7-61, 8-23 to 8-28, 8-30 to 8-88, 9-25 to 9-28, 9-30 to 9-56, 10-15 to 10-17, 10-21 to 10-50 1-32 to 1-33, 1-41 to 1-52, 4-30 to 4-31, 4-35 to 4-58, 5-17 to 5-18, 5-21 to 5-41, 6-46 to 6-49, 6-53 to 6-67, 7-28 to 7-31, 7-35 to 7-46 2-14 to 2-15, 2-16 to 2-40, 3-10 to 3-11, 3-12 to 3-31, 4-30 to 4-33, 4-36 to 4-43, 5-12 to 5-15, 5-19 to 5-27, 6-13 to 6-16, 6-18 to 6-44, 7-7 to 7-11, 7-15 to 7-36 1-11 to 1-12, 1-15 to 1-33, 2-2, 3-22 to 3-24, 3-37 to 3-110, 4-21 to 4-25, 4-32 to 4-77, 5-12 to 5-15, 5-19 to 5-43
7.0 IMPACT ASSESSMENT METHODOLOGY	7.13 INDICATORS AND CRITERIA		In its discussion of indicators, the Proponent shall emphasize the linkage between those indicators and the relevant VECs or VSECs and how TK was used in the selection of indicators used to assess potential impacts of the Project. The indicators for the VECs should include sensitivity to contaminants and environmental pathways of exposure and bio-magnification.	4 5 6 7 8 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 6	X.2, X.5.1 X.2, X.5.1 X.2, X.5.1 X.2, X.5.1 X.2, X.5.1 6.4.1.9, 6.4.2.9		1-10 to 1-11, 1-15 to 1-19, 1-26, 2-6 to 2-7, 2-11 to 2-13 4-17 to 4-19, 4-26 to 4-28, 5-74 to 5-77, 5-83 to 5-85, 6-20 to 6-30, 6-35 to 6-37, 7-13 to 7-15, 7-19 to 7-21, 8-23 to 8-28, 8-30 to 8-34, 9-25 to 9-28, 9-30 to 9-35, 10-15 to 10-17, 10-21 to 10-24 1-32 to 1-33, 1-41, 4-30 to 4-31, 4-35 to 4-38, 5-17 to 5-18, 5-21 to 5-24, 6-46 to 6-49, 6-53 to 6-54, 7-28 to 7-31, 7-35 to 7-36 2-14 to 2-20, 3-10 to 3-11, 3-12 to 3-17, 4-30 to 4-33, 4-36 to 4-39, 5-12 to 5-15, 5-19 to 5-20, 6-13 to 6-16, 6-18 to 6-22, 7-7 to 7-11, 7-15 to 7-17 1-11 to 1-12, 1-15 to 1-16, 3-22 to 3-24, 3-37 to 3-41, 4-21 to 4-25, 4-32 to 4-36, 5-12 to 5-15, 5-19 to 5-21 6-70 to 6-80, 6-123 to 6-134
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		In the process of significance determination, the Proponent is expected to communicate with potentially affected communities, including relevant individuals and organizations to solicit input and incorporate their views regarding the value it placed on a VEC or VSEC, as well as associated significance of impacts.	3	1, 3	1.6.2.2, 1.6.2.3, 3.3.2, 3.3.3	Significance assessment comments from communities will be provided with the FEIS	1-35 to 1-36, 3-39 to 3-40
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		The Proponent shall describe how it will determine the significance that different parties assigned to each impact, and how it will proceed if different parties ascribe varying significance to VECs, VSECs, the interaction between VECs and VSECs or the associated impacts. If it is impossible to attain a consensus on the significance of certain impacts, the Proponent shall present the range of viewpoints expressed and shall present and justify its preference, if any.	9	1	1.2.3	-	1-4 to 1-15
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		The Proponent shall describe the significance it ascribes to each effect, and justify how the significance of the effect was determined, taking into consideration and avoiding duplication of the information provided above. Furthermore, the proponent shall demonstrate how uncertainty was accounted for in their significance determination for each predicted effect.	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 All	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		The dynamic change of ecosystems and their components must also be considered in determining impact significance. The Proponent shall evaluate the significance of potential impacts in the light of data on the current “state of health” of ecosystems and their predictable evolution, taking into account global climate change.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5.1, X.5.4, X.5.5, X.6.1, X.10	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		Consistent with the ecosystem approach required above, the Proponent should highlight the interactions within and between ecosystem components in an effort to increase understanding of the dynamism of the ecosystems in question and the nature and severity of the predicted impacts.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5.1, X.5.4, X.5.5, X.6.1, X.10	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		The terms used to describe the level of significance, such as "low", "medium", "high", "adverse", "beneficial", "positive", "negative" must be clearly defined, where possible in quantitative terms. The following attributes defined by the NIRB shall be taken into consideration in determining the significance of each impact:	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 1.2.4.4, 1.2.4.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 1-26 to 1-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		i. Probability of effects,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 1.2.4.4, 1.2.4.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 1-26 to 1-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		ii. Direction or nature of impact (i.e. positive/beneficial versus negative/adverse),	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 1.2.4.4, 1.2.4.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 1-26 to 1-33

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		ii. Direction or nature of impact (i.e. positive/beneficial versus negative/adverse),	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 1.2.4.4, 1.2.4.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 1-26 to 1-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		iv. Geographic extent of effects,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 1.2.4.4, 1.2.4.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 1-26 to 1-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		v. Frequency and/or duration of effects,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 1.2.4.4, 1.2.4.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 1-26 to 1-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		vi. Reversibility or irreversibility of effects, and	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 1.2.4.4, 1.2.4.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 1-26 to 1-33

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		vii. Identification of potential residual effects (see Section 9.8).	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 1.2.4.4, 1.2.4.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 1-26 to 1-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		In addition, the NIRB considers other relevant attributes in assessing the significance of an impact:	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 1.2.4.4, 1.2.4.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 1-26 to 1-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		viii. Ecological or socio-economic context/value,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 1.2.4.4, 1.2.4.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 1-26 to 1-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		ix. The environmental sensitivity of the area likely to be affected by the Project,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 X.5.1, X.5.4, X.5.5, X.6.1, X.10 1.2.4.4, 1.2.4.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5); Section X.5.9 (instead of X.5.10) for Volume 6 Chapter 1, Volume 8 Chapter 5	1-15 to 1-19, 1-26 to 1-28, 1-30, 2-11 to 2-13, 2-32 to 2-35, 2-37 4-26 to 4-28, 4-33 to 4-63, 4-71, 5-83 to 5-85, 5-112 to 5-119, 5-155, 6-35 to 6-37, 6-59 to 6-64, 6-83, 7-19 to 7-21, 7-43 to 7-48, 7-66, 8-30 to 8-34, 8-62 to 8-68, 8-94, 9-30 to 9-50, 9-52 to 9-56, 9-62, 10-21 to 10-43, 10-45 to 10-50, 10-55 1-41 to 1-44, 1-51 to 1-53, 4-35 to 4-38, 4-53 to 4-58, 4-62 to 4-63, 5-21 to 5-24, 5-36 to 5-41, 5-45, 6-53 to 6-54, 6-67, 6-72, 7-35 to 7-36, 7-44 to 7-46, 7-50 to 7-51 2-16 to 2-20, 2-34 to 2-37, 2-39 to 2-40, 2-44, 3-12 to 3-17, 3-27 to 3-31, 3-35, 4-36 to 4-39, 4-43, 4-46 to 4-47, 5-19 to 5-20, 5-25 to 5-27, 5-31 to 5-32, 6-18 to 6-22, 6-34 to 6-44, 6-50 to 6-51, 7-15 to 7-17, 7-36, 7-42 1-15 to 1-16, 1-30 to 1-33, 1-35, 3-37 to 3-41, 3-86 to 3-92, 3-92 to 3-98, 3-115 to 3-116, 4-32 to 4-36, 4-53 to 4-64, 4-80 to 4-81, 5-19 to 5-21, 5-31 to 5-44 1-26 to 1-33
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		x. The historical, cultural and archaeological significance of the geographic area likely to be affected by the Project,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.2 X.2 X.2 X.2 X.2 All	-	1-10 to 1-11, 2-6 to 2-7 4-17 to 4-19, 5-74 to 5-77, 6-20 to 6-30, 7-13 to 7-15, 8-23 to 8-28, 9-25 to 9-28, 10-15 to 10-17 1-32 to 1-33, 4-30 to 4-31, 5-17 to 5-18, 6-46 to 6-49, 7-28 to 7-31 2-14 to 2-15, 3-10 to 3-11, 4-30 to 4-33, 5-12 to 5-15, 6-13 to 6-16, 7-7 to 7-11 1-11 to 1-12, 3-22 to 3-24, 4-21 to 4-25, 5-12 to 5-15 All
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		xi. The size of the affected human populations, and the size of the affected wildlife populations and related habitat,	5 8	4, 5, 6, 7, 8 3	X.5.1, X.5.4, X.5.5, X.6.1, X.6.3, X.6.4, X.6.5	-	4-26 to 4-28, 4-33 to 4-63, 4-65 to 4-68, 5-83 to 5-85, 5-112 to 5-119, 5-145 to 5-147, 6-35 to 6-37, 6-59 to 6-64, 6-74 to 6-76, 7-19 to 7-21, 7-43 to 7-48, 7-57 to 7-61, 8-30 to 8-34, 8-62 to 8-65, 8-83 to 8-88 3-37 to 3-41, 3-83 to 3-88, 3-92 to 3-98, 3-100 to 3-106

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		xii. The extent of the effects of the project on other regional human populations and wildlife populations, including the extent of the effects on Inuit harvesting activities,	5 8	4, 5, 6, 7, 8 3	X.5.1, X.5.4, X.5.5, X.6.1, X.6.3, X.6.4, X.6.5	-	4-26 to 4-28, 4-33 to 4-63, 4-65 to 4-68, 5-83 to 5-85, 5-112 to 5-119, 5-145 to 5-147, 6-35 to 6-37, 6-59 to 6-64, 6-74 to 6-76, 7-19 to 7-21, 7-43 to 7-48, 7-57 to 7-61, 8-30 to 8-34, 8-62 to 8-65, 8-83 to 8-88 3-37 to 3-41, 3-83 to 3-88, 3-92 to 3-98, 3-100 to 3-106
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		xiii. The potential for cumulative adverse effects given past, present and future relevant events,	4 5 6 7 8 9	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.5.1, X.5.4, X.5.5, X.6.1, X.6.3, X.6.4, X.6.5	-	1-15 to 1-19, 1-26 to 1-29, 2-11 to 2-13, 2-2-32 to 2-35 4-26 to 4-28, 4-33 to 4-63, 4-65 to 4-68, 5-83 to 5-85, 5-112 to 5-119, 5-145 to 5-147, 6-35 to 6-37, 6-59 to 6-64, 6-74 to 6-76, 7-19 to 7-21, 7-43 to 7-48, 7-57 to 7-61, 8-30 to 8-34, 8-62 to 8-65, 8-83 to 8-88, 9-30 to 9-35, 9-52 to 9-56, 10-21 to 10-24, 10-45 to 10-50 1-41 to 1-49, 1-51 to 1-51, 4-35 to 4-38, 4-53 to 4-58, 5-21 to 5-24, 5-36 to 5-41, 6-53 to 6-54, 6-67, 7-35 to 7-36, 7-44 1-15 to 1-16, 1-30 to 1-33, 3-37 to 3-41, 3-83 to 3-88, 3-92 to 3-98, 3-100 to 3-106, 4-32 to 4-36, 4-53 to 4-64, 4-67 to 4-73 1-1 to 1-47
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		xiv. Effects on ecosystem function and integrity,	5 8	4, 5, 6, 7, 8 3	X.5.1, X.5.4, X.5.5, X.6.1, X.6.3, X.6.4, X.6.5	-	4-26 to 4-28, 4-33 to 4-63, 4-65 to 4-68, 5-83 to 5-85, 5-112 to 5-119, 5-145 to 5-147, 6-35 to 6-37, 6-59 to 6-64, 6-74 to 6-76, 7-19 to 7-21, 7-43 to 7-48, 7-57 to 7-61, 8-30 to 8-34, 8-62 to 8-65, 8-83 to 8-88 3-37 to 3-41, 3-83 to 3-88, 3-92 to 3-98, 3-100 to 3-106
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		xv. The effect on the capacity of resources to meet present and future needs, and	5 8	4, 5, 6, 7, 8 3	X.5.1, X.5.4, X.5.5, X.6.1, X.6.3, X.6.4, X.6.5	-	4-26 to 4-28, 4-33 to 4-63, 4-65 to 4-68, 5-83 to 5-85, 5-112 to 5-119, 5-145 to 5-147, 6-35 to 6-37, 6-59 to 6-64, 6-74 to 6-76, 7-19 to 7-21, 7-43 to 7-48, 7-57 to 7-61, 8-30 to 8-34, 8-62 to 8-65, 8-83 to 8-88 3-37 to 3-41, 3-83 to 3-88, 3-92 to 3-98, 3-100 to 3-106
7.0 IMPACT ASSESSMENT METHODOLOGY	7.14 SIGNIFICANCE DETERMINATION		xvi. The value attached to the impacted VEC or VSEC by those who identified them.	3	3	3.1.3	Table 3.1-2	3-2
7.0 IMPACT ASSESSMENT METHODOLOGY	7.15 CERTAINTY		The Proponent shall assess the degree of uncertainty associated with each predicted effect. The level of certainty with predictions is related to limitations in the overall understanding of the ecosystem and limitations in accurately foreseeing future events or conditions.	9 4 5 6 7 8	1 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	1.2.4.4, 1.2.4.5 1.5.4, 1.5.5, 2.5.4, 2.5.5 4.5.4, 4.5.5, 5.5.4, 5.5.5, 6.5.4, 6.5.5, 7.5.4, 7.5.5, 8.5.4, 8.5.5, 9.5.4, 9.5.5, 10.5.4, 10.5.5 4.5.4, 4.5.5, 5.5.4, 5.5.5, 6.5.4, 6.5.5, 7.5.4, 7.5.5 2.5.4, 2.5.5, 3.5.4, 3.5.5, 4.5.4, 4.5.5, 5.5.4, 5.5.5 1.5.4, 1.5.5, 3.5.4, 3.5.5, 4.5.4, 4.5.5, 5.5.4, 5.5.5	-	1-26 to 1-33 1-26 to 2-28, 2-32 to 2-33 4-33 to 4-62, 5-112 to 5-114, 6-59 to 6-62, 7-43 to 7-45, 8-62 to 8-65, 9-52 to 9-54, 10-45 to 10-48 4-53 to 4-56, 5-36 to 5-39, 6-67, 7-44 2-34 to 2-39, 3-27 to 3-29, 4-43, 5-25 1-30, 3-86 to 3-92, 4-53 to 4-58, 5-31 to 5-43
7.0 IMPACT ASSESSMENT METHODOLOGY	7.15 CERTAINTY		The Proponent shall provide a reasonable description how uncertainties have been dealt with, for example, through elements of the project design, monitoring and contingency plans design, etc.	9 10	1 1	1.2.4 4.1	-	1.17 to 1.33 1-4
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	7.15 CERTAINTY		The EIS shall provide a complete analysis of the predicted effects from the Project on the biophysical and socio-economic environments (see Section 7.0), and will serve as a basis for developing various mitigation and monitoring plans to address the potential impacts of the Project.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5, X.6, X.7, X.8, X.9, X.10	Exceptions: no Section X.5.10 for Volume 6 Chapter 1; Additional Section X.5.11 for Volume 6 Chapter 4, and Volume 7 Chapters 6 and 7, and Volume 8 Chapter 1	1-15 to 1-30, 2-11 to 2-37 4-26 to 4-71, 5-83 to 5-156, 6-35 to 6-84, 7-19 to 7-67, 8-30 to 8-95, 9-30 to 9-63, 10-21 to 10-56 1-41 to 1-53, 4-35 to 4-64, 5-21 to 5-45, 6-53 to 6-72, 7-35 to 7-51 2-16 to 2-44, 3-12 to 3-35, 4-36 to 4-47, 5-19 to 5-32, 6-18 to 6-57, 7-15 to 7-49 1-15 to 1-35, 3-37 to 3-116, 4-32 to 4-81, 5-19, to 5-44
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		The Proponent shall present relevant information pertaining to the biophysical environment and associated processes to be assessed (see Section 7.3) to serve as a baseline against which the potential impacts of the Project can be measured. Information should be presented in the form of a conceptual site model with clear links to ecological and human health risk assessment presented throughout the document. Baseline summaries should also include trends, timelines and how the environment is expected to change over the life of the Project.	4 5 6 7 8 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 6	X.1 X.1 X.1 X.1 X.1 All	Baseline in X.1 of all VEC and VSEC chapter, ecological and human health in volume 8, chapter 6	1-1 to 1-10, 2-1 to 2-6 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-19, 7-1 to 7-12, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-31, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-11, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12 All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		In describing the biophysical environment, the Proponent shall take an ecosystemic approach that takes into account both scientific and TK perspectives encompassing all levels of complexity found in an ecosystem, both structurally and functionally.	4, 5, 6, 7, 8	All	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		In its impact assessment, the Proponent shall identify and justify the thresholds or indicators, and further relate them to Project monitoring and follow-up measures. For each predicted negative impact in this section, associated mitigation measures are to be discussed to the extent possible, with references to project design (Section 6.1) and environmental management systems (Section 9.0).	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5, X.6, X.7, X.8, X.9, X.10	Exceptions: no Section X.5.10 for Volume 6 Chapter 1; Additional Section X.5.11 for Volume 6 Chapter 4, and Volume 7 Chapters 6 and 7, and Volume 8 Chapter 1	1-15 to 1-30, 2-11 to 2-37 4-26 to 4-71, 5-83 to 5-156, 6-35 to 6-84, 7-19 to 7-67, 8-30 to 8-95, 9-30 to 9-63, 10-21 to 10-56 1-41 to 1-53, 4-35 to 4-64, 5-21 to 5-45, 6-53 to 6-72, 7-35 to 7-51 2-16 to 2-44, 3-12 to 3-35, 4-36 to 4-47, 5-19 to 5-32, 6-18 to 6-57, 7-15 to 7-49 1-15 to 1-35, 3-37 to 3-116, 4-32 to 4-81, 5-19 to 5-44
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		The Proponent shall also include a consideration of the temporal scale and predictions of when potential impacts to each relevant VEC could reasonably be expected to manifest.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.4, X.5, X.6, X.7, X.8, X.9, X.10	Exceptions: no Section X.5.10 for Volume 6 Chapter 1; Additional Section X.5.11 for Volume 6 Chapter 4, and Volume 7 Chapters 6 and 7, and Volume 8 Chapter 1	1-12 to 1-30, 2-8 to 2-37 4-25 to 4-71, 5-80 to 5-156, 6-32 to 6-84, 7-16 to 7-67, 8-29 to 8-95, 9-29 to 9-63, 10-18 to 10-56 1-34 to 1-53, 4-32 to 4-64, 5-18 to 5-45, 6-50 to 6-72, 7-32 to 7-51 2-15 to 2-44, 3-11 to 3-35, 4-35 to 4-47, 5-16 to 5-32, 6-17 to 6-57, 7-12 to 7-49 1-12 to 1-35, 3-36 to 3-116, 4-31 to 4-81, 5-16 to 5-44

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		The Proponent shall include a prediction of trends relating to potential project impacts that provides for a temporal scale which encompasses all closure and reclamation activities.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.4, X.5, X.6, X.7, X.8, X.9, X.10	All methodology and residual effects and significance determination sections for VEC and VSEC chapters Exceptions: no Section X.5.10 for Volume 6 Chapter 1; Additional Section X.5.11 for Volume 6 Chapter 4, and Volume 7 Chapters 6 and 7, and Volume 8 Chapter 1	1-12 to 1-30, 2-8 to 2-37 4-25 to 4-71, 5-80 to 5-156, 6-32 to 6-84, 7-16 to 7-67, 8-29 to 8-95, 9-29 to 9-63, 10-18 to 10-56 1-34 to 1-53, 4-32 to 4-64, 5-18 to 5-45, 6-50 to 6-72, 7-32 to 7-51 2-15 to 2-44, 3-11 to 3-35, 4-35 to 4-47, 5-16 to 5-32, 6-17 to 6-57, 7-12 to 7-49 1-12 to 1-35, 3-36 to 3-116, 4-31 to 4-81, 5-16 to 5-44
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.1 Air Quality		-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.1.1 Baseline Information	i. Background ambient air quality data collected in the LSA and RSA including airborne dust (TSP, PM10 and PM2.5),	4	1	1.1.2	-	1-5 to 1-10
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Current sources of criteria air contaminants [TSP, PM10, PM2.5, NOx, SO2, volatile organic compounds (VOCs), Ozone (O3) etc.] and GHG emissions, and	4	1 3	1.1.3 3.1.1.2	-	1-10 3-1
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Seasonal variations or climatic conditions associated with variations on air quality.	4	1	1.1.4	-	1-10
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.1.2 Impact Assessment	The Proponent is required to present a comprehensive impact analysis for all Project components and activities on air quality. This analysis shall include the following:	4	1	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. Discussion of the standards, guidelines and regulations that the Proponent will incorporate to minimize and mitigate effects to air quality,	4	1	1.5.1	Table 1.5-2	1-17 to 1-18
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Predictions of principle pollution emission sources from the Project at various stages, including:	4	1, 3	1.5.2, All	-	1-1 9 to 1-21, All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Criteria air contaminants [TSP, PM10, PM2.5, NOx, SO2, volatile organic compounds (VOCs), Ozone (O3), etc.] and GHG emissions from the fuel consumption of mobile equipment such as vehicles, marine vessels, aircraft, and stationary equipment such as diesel generators and other combustion sources,	4	1, 3	1.5.1, 1.5.2, 3.4.2.2	page 1-17 explains why VOCs and O3 was not included	1-17, 1-21 to 1-25, 3-26 to 3-28
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Fugitive dust and gaseous emissions from construction activities and land clearing, extraction and ore processing, handling, tailings, waste rock and ore stockpiling, quarries and other Project components and works, and	4	1	1.5.2.2	Table 1.5-7 and 1.5-7	1-21 to 1-25
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Fugitive dust emissions from ground transportation and wind erosion at various Project components including the all-weather road, access roads and mine hauling roads.	4	1	1.5.2.2	Table 1.5-7	1-21 to 1-25
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Assessment of dispersion of Project emissions within the LSA and RSA, using appropriate modelling, and discussion of related impacts and mitigation strategies,	4	1	1.5.2.2 - 1.5.5	details of model can be found in Appendix V4-1B, Ch 6, Section 6.1, Page 6-1	1-21 to 1-27
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Discussion of Project components and activities which may contribute to the potential for acidic input, and an evaluation of associated effects,	4	1	1.1.2.2, 1.5.2	-	1-5, 1-19 to 1-25
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Assessment of effects on air quality from Project emissions during various project stages including airborne dust (TSP, PM10 and PM2.5 and/or metals) and criteria air contaminants such as SO2, NOx, CO, VOCs, O3, etc.,	4 8	1 6	1.5.1, 1.5.2.1, 1.5.2.2 6.4.2.7, 6.4.2.10	page 1-17 explains why VOCs and O3 was not included	1-17, 1-20 to 1-25 6-97 to 6-134
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Assessment of the Project's GHG contributions to both Nunavut and Canada, and	4	3	3.4.2	Table 3.4-9	3-29
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. A discussion of the potential effects of changes in air quality on human health and the environment.	8	6	6.4.1.10, 6.4.1.11, 6.4.2.10	-	6-80 to 6-89, 6-134
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.2 Climate and Meteorology	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.2.1 Baseline Information	i. A description of the baseline meteorological and climatic conditions at the LSA and RSA, including methods of determination including a discussion of how data from outside the project area may have been utilized and uncertainties encountered,	4	3	3.1.1.1, 3.1.2	-	3-1 to 3-16
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Meteorological data including, but not limited to, air temperature, precipitation, wind directions and velocity, as well as prevailing wind directions for locations of proposed project components and along proposed shipping route(s),	4	3	3.1.2.2	-	3-4 to 3-16
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Annual, seasonal, monthly and daily average and mean values of above noted meteorological parameters, seasonal and yearly fluctuations and variability, and extreme climate events over the same period of time in which the data including site-specific data are collected in the RSA of the Project, and	4	3	3.1.2.2	-	3-4 to 3-16
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Prevalent trends related to VECs in the project area and any resulting implications to the Project.	4	3	3.1.1.3	-	3-1 to 3-2
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.2.2 Impact Assessment	The Proponent is required to present a comprehensive analysis of the impact that all components of the Project and activities may have on climate and meteorology. This analysis shall include the following:	4	3	3.4.2.1	-	3-26 to 3-29

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. A discussion of the relationship between climate change and GHG emissions from the Project, and	4	3	3.4.2.1	-	3-26 to 3-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A discussion on the climate parameters that may change due to emissions from the Project [GHGs, and criteria contaminants such as SO2, NOx, CO, VOCs, O3, etc.].	4	3	3.4.2.1	-	3-26 to 3-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.3 Noise and Vibration	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.3.1 Baseline Information	i. A description of baseline noise and vibration levels in the Project area, including a discussion on variability, and if applicable, the relationship between these parameters and local weather conditions, seasonal variations, etc.,	4	2	2.1.2	-	2-2 to 2-6
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A review of available studies/research the potential impacts of noise and vibrations on wildlife behaviours and health in both terrestrial and marine environments, with a focus on noise from similar mining and shipping operations, in comparable climate and geographical regions if possible. Emphasis should be placed on level of noise and the identification of noise sensitive species, timing, etc., and	5 7	5, 6, 7, 8, 9, 10 6, 7	5.5.2.2, 6.5.2.2, 7.5.2.2, 8.5.2.2, 9.5.2.2, 10.5.2.2 6.5.2.2, 7.5.2.2.	-	5-93, 6-44, 7-28, 8-41, 9-40, 10-28 6-25, 7-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. A review of available studies/research on the potential impacts of noise and vibrations from blasting in or near freshwater and marine environments.	7	5	5.5.2.2	-	5-22
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.3.2 Impact Assessment	The Proponent is required to present a comprehensive analysis of the impact that all Project components and activities may have on noise and vibration. This analysis shall include the following:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. A description of anticipated noise and vibration levels from all relevant Project equipment and activities,	4 7 8	2 5 6	2.3.1, 2.5.2.1, 2.5.2.2 5.5.2.2 6.4.3.10	-	2-7 to 2-15 5-22 6-151
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A discussion of the standards, guidelines, thresholds and regulations that the Proponent will comply with to minimize and mitigate impacts associated with noise and vibrations,	4	2	2.5.2.3	Table 2.5-6	2-16 to 2-19
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Potential increase to atmospheric noise levels from Project activities at different project stages, including those contributions arising from:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Ground transportation, including mine traffic, other access roads and the public where applicable,	4	2	2.5.2.3	(Included in the Mining Construction and Operation scenario) Table 2.5-7 (human receptors) Table 2.5-10 (wildlife receptors) Figures 2.5-3 and 2.5-4	2-19 to 2-23
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Air transportation,	4	2	2.5.2.3	Table 2.5-8 (human receptors) Table 2.5-11 (wildlife receptors) Figures 2.5-5 to 2.5-8	2-19 to 2-28
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Equipment use at mine and construction sites, including power generators, and	4	2	2.5.2.3	(included in the Mining Construction and Operation scenario) Table 2.5-7 (human receptors) Table 2.5-10 (wildlife receptors) Figures 2.5-3 and 2.5-4	2-19 to 2-23
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Mine site operations including: blasting, drilling, crushing, screening, milling, smelting, transportation and stockpiling activities,	4	2	2.5.2.3	(included in the Mining Construction and Operation scenario) Table 2.5-7 (human receptors) Table 2.5-10 (wildlife receptors) Figures 2.5-3 and 2.5-4	2-19 to 2-23
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Potential changes in marine noise levels due to shipping activities, as well as noise propagation in the marine environment, and	4 7	2 6, 7	2.5.2.1 6.5.2.2, 7.5.2.2	-	2-15 6-25 to 6-28, 7-21 to 7-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Potential impacts of noise and vibration on the following:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Humans and human activity in close proximity to noise generating sources,	8	6	6.4.3.11.2	-	6-154 to 6-156
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Terrestrial wildlife, with a focus on caribou and migratory birds and Species at Risk,	5 7	5, 6, 7, 8, 9, 10 6	5.5.2.2, 6.5.2.2, 7.5.2.2, 8.5.2.2, 9.5.2.2, 10.5.2.2 6.5.2.2	Caribou, Grizzly Bears, Muskox, Wolverines and Furbearers, Migratory, Birds, Raptors Seabirds and Seaducks (included in both terrestrial wildlife and marine mammals)	5-93 to 5-100, 6-44 to 6-52, 7-28 to 7-37, 8-41 to 8-53, 9-40 to 9-46, 10-28 to 10-39 6-25 to 6-28
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Marine mammals, and	7	6 7	6.5.2.2 7.5.2.2	Seabirds and Seaducks (included in both terrestrial wildlife and marine mammals) Ringed Seals	6-25 to 6-28 7-21 to 7-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Fish in fresh water and marine environments.	7	5	5.5.2.2, 5.5.4	-	5-22, 5-25
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.4 Terrestrial Environment	For the purpose of the current Guidelines, terrestrial environment includes terrestrial ecology, landform and soils, permafrost, and ground stability.	5	All	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.4.1 Baseline Information	i. A description of existing unique or valuable landforms (e.g. eskers, fragile landscapes, wetlands), including details regarding their ecological functions and distribution in the LSA,	5	4	4.1, 4.3.2.2	-	4-1 to 4-17, 4-22 to 4-25

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A description of existing or proposed protected areas, special management areas, and conservation areas in the RSA,	5	4	4.1	-	4-1 to 4-17
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. A discussion of the landforms and topographic features at areas proposed for construction of major project components, including the type, thickness, soil stability and/or clay sensitivity, and classification and distribution of soils as applicable,	5	3	3.4.1.3, 3.4.1.4	No data specific to soil stability and clay sensitivity	3-34 to 3-35
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. A description of the bedrock lithology, morphology, surface geology, landform and soils (including sediments and the thermal and ground ice conditions) at proposed borrow and quarry sites, project facilities such as tailing and waste rock management facilities, roads, and other areas where earthworks are proposed. 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 included,	5	1, 2, 4	1.1, 2.1, 4.1	-	1-1 to 1-12, 2-1 to 2-27, 3-1 to 3-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. A discussion of the potential of geohazards, that may have an effect on the project or the occurrence of which may potentially be affected by the Project (e.g., slumping, landslides, potential slippage, seismic hazards) at areas planned for Project facilities and infrastructure,	5 9	3 2	3.4.1 2.2	-	3-35 2-1 to 2-7
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. A 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,	5	2, 3, 4	2.4.1, 3.1, 4.1	-	2-28, 3-1 to 3-16, 4-1 to 4-19
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. Details regarding the suitability of topsoil and overburden for use in the re-vegetation of surface-disturbed areas,	5	3	3.1.3	-	3-6 to 3-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. A description of permafrost distribution in the LSA, including areas of discontinuous permafrost, high ice-content soils, ice lenses, thaw-sensitive slopes, and talik zones,	5	2, 3	2.1, 3.4.1.3	-	2-1 to 2-28, 3-34
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. A description of permafrost temperatures at areas planned for Project facilities and infrastructure, including discussion of sensitivity to climate change, and implications for stability and safety of infrastructures, and	5	2, 3	2.1, 3.4.1.3	-	2-1 to 2-28, 3-34
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. Sites of paleontological or palaeobotanical significance within the LSA.	8	2	2.1	-	2-1 to 2-2
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.4.2 Impact Assessment	The Proponent is required to present a comprehensive analysis of the impact that all Project components and activities may have on the terrestrial environment. This analysis shall include the following:	5	All	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. The general impact on topography in the LSA as a result of Project development, borrow resource extraction, with a focus on sensitive landforms, and those serving as important vegetation and wildlife habitat,	5	4	4.5.2, 4.8.4	-	4-28 to 4-32, 4-69 to 4-70
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Potential impacts on the abundance and distribution of unique or valuable landforms (e.g. wetlands, eskers and fragile landscapes) from the Project,	5	4	4.5.4.1	-	4-33 to 4-60
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Potential for soil erosion, including stream bank erosion, resulting from surface disturbances associated with the Project components and activities (e.g. road embankments, water crossings, water management/diversions) during all Project phases,	5	3	3.4.1.1	-	3-33
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Potential impacts to soil quality from compaction, the deposition of air emissions and airborne fugitive dust emissions and/or spills from the Project,	5 8	3 6	3.4.1, Appendix V4-1B 6.4.4	-	3-34, Appendix V4-1B 6-156
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Implications to the Project planning and design of design of project components related to terrain conditions, in particular permafrost, sensitive landforms, high ice-content soils, ice lenses, thaw-sensitive slopes, and talik zones,	5 6 9	3 2 2	2.4.1, 3.4.1.3 2.1.2 2.2, 2.3, 2.4	-	2-28 to 2-29, 3-34 to 3-35 2-10 to 2-26 2-1 to 2-9
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Potential impacts on the stability of terrain, in particular the thermal stability, in the vicinity of facilities and infrastructure due to the thawing of the ice-rich permafrost soils and other sensitive landforms. Discussion should focus on the potential for impacts arising from surface disturbances due to construction (e.g. overburden stripping, mine pit creation, cuts/fills, excavation) of the facility and infrastructure,	5	3	3.4.1	-	3-35
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. An assessment and prediction of permafrost behaviour (degradation and its rate) beneath the pits during mining and operation of the tailings management facilities including disposing of waste rock. Long-term predictions of the thermal regime around the tailings management facilities should be conducted with the consideration of climate change. Numerical modelling should be employed for both short term and long term predictions of permafrost evolution including predictions of artesian inflow into the tailings management facilities if thawing of permafrost is envisioned,	5	2	2.1.2	-	2-5 to 2-27
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Potential impacts on contamination of traditional foods as a result of bioaccumulation, (i.e. food chain uptake through air, water and soil),	8	5, 6	5.5, 6.4.1.7, 6.4.2.7	-	5-19-5-43, 6-36 to 6-57, 6-97 to 6-113
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. Potential impacts on food (i.e. contamination of country foods) including those harvested or grown for subsistence or medicinal purposes (i.e. berries, etc.),	8	5, 6	5.5, 6.4.1.7, 6.4.2.7, 6.4.2.12	-	5-19-5-43, 6-36 to 6-57, 6-97 to 6-113, 6-142
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. A discussion of whether country foods are consumed, or are expected to be consumed, in the potentially affected area,	8	5, 6	5.1, Appendix V8-5A, 6.1.8, 6.4.2.12	-	5-1 to 5-4, Appendix V8-5A, 6-11, 6-142
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xi. Identification of what country foods are consumed, which parts of country foods are consumed, and their consumption frequency,	8	5	5.1, Appendix V8-5A	-	5-1 to 5-12, Appendix V8-5A

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xii. Lists all potential contaminants and a determination of whether these contaminants may persist into country foods as a result from project activities,	8	6	6.4.1.6, 6.4.1.7, 6.4.2.6, 6.4.2.10	-	6-35 to 6-38, 6-95 to 6-75, 6-143 to 6-141
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xiii. Potential impact from the loss or alteration of habitat (i.e. vegetation) due to pollutants and noise and its effects on wildlife, wildlife calving grounds and marine habitat,	5	5, 6, 7, 8, 9, 10	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xiv. A discussion on environmental receptivity including ecological, physical and/or climatic factors that influence exposure to harmful substances, and	4	3	3.4	-	3-18 to 3-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xv. A discussion of the potential for the occurrence, frequency and distribution of terrain hazards, including snow drifts and snow banks, as a result of construction activities (e.g. cut/fill, extraction of construction materials).	5	3	3.4	-	3-18 to 3-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.5 Geological Features, Surficial and Bedrock Geology and Geochemistry	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.5.1 Baseline Information	i. A description of local and regional bedrock and quaternary geology. The history of the geological formations and the description of their physical, chemical and hydrogeological properties should be given. For data obtained with in-situ investigations, maps should be provided showing the location of the boreholes, with their positions relative to the planned project component,	5 6 2	1, 2 2 7	1.1, 2.1 2.1 7.1	-	1-1 to 1-12, 2-1 to 2-27 2-1 to 2-28 7-1 to 7-13
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A description of structural geology, such as fractures and faults, at major project infrastructure areas and where earthworks are proposed (e.g. mine site(s), port site, tank farm(s) and storage facilities, etc.),	5 2	1 7	1.1 7.1	-	1-1 to 1-12 7-1 to 7-13
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Typical regional and local cross-sections of the general geology should be provided showing the geological units and their elevation, groundwater table, and linear geological structures,	5 6 2	1, 2 2 7	1.1, 2.1 2.1 7.1	-	1-1 to 1-12, 2-1 to 2-27 2-1 to 2-28 7-1 to 7-13
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. A description of the geotechnical properties of bedrock and soil units, including ice content and thermal conditions of permafrost soils and rocks, as relating to slope stability, underground stability, and bearing capacity of facility foundations, and	2 5 6	7 2 2	7.1.5 2.1 2.1, Appendix V6-2D	-	7-11 to 7-12 2-1 to 2-27 2-1 to 2-28, Appendix V6-2D
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. An acquisition of the in-situ stress either with in-situ investigation or from other sources with reasonable confidence.	N/A	N/A	N/A	This will be addressed in detailed design, FEIS	N/A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.5.2 Impact Assessment	The Proponent is required to present a comprehensive impact analysis for all Project components and activities on geology. This analysis should include the following:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. Potential geotechnical and geophysical hazards within the Project area, including potential seasonal subsidence, seismicity and faulting, risks associated with cut/fill slopes, underground excavation, and surface constructed facilities. Where appropriate, the assessment should be supplemented by analysis and illustrations such as maps, figures, cross sections and borehole logs,	5 6	2 2	2.1.2.1 Appendix V6-2C	Figure 2.1-2, 2.1-3 Further geotechnical information to be provided with detailed design, FEIS	2-5 to 2-13 Appendix V6-2C
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Potential effects on foundation stability of major Project components from geological fractures and faults, and associated implications of these features on project planning and engineering design. Those Project components assessed shall include, but are not limited to the port facilities, major watercourse crossings, open pits, underground mine, and equipment pads, and	2 6 9 10 11	6 2 2 7, 9 4	6.6.13 2.1.2.2, 2.1.2.3 2.3 3.6.3, 3.2.5 Appendix V11-4C	Further geotechnical information to be provided in FEIS	6-28 2-15 to 2-19, 2-27 to 2-28 2-7 7-23, 9-13 to 9-14 Appendix V11-4C
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Risk assessment and predictions, including proposed management measures.	N/A	N/A	N/A	Geology is Subject of Note only.	N/A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.6 Hydrological Features and Hydrogeology	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.6.1 Baseline Information	i. A description of hydrology of the LSA (e.g. streams, surface water flows, subsurface water movement, ice formation, and melt patterns),	6	1	1.1.2	-	1-14 to 1-26
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A description of relevant hydrological regimes, drainage basins, watershed boundaries and site water balance in the RSA,	6	1	1.1.1	-	1-1 to 1-14
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. A description of natural fluctuations, variability, and sources of variability in flow rates, including seasonal fluctuations and year-to-year variability, and the interactions between surface water and groundwater flow systems,	6	1, 2	1.1, 2.1	-	1-1 to 1-31, 2-1 to 2-28
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. A description of the timing of freeze/thaw cycles, flood zones, ice cover (seasonal patterns and spatial variation), and ice conditions and typical thicknesses, formations and melt patterns,	6	1, 3	1.1, 3.1	-	1-1 to 1-31, 3-1 to 3- 16
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. A description of hydrological characteristics of streams, rivers, and lakes in each watershed of the RSA. Items listed should be considered within the context of the range of climate conditions expected (include both climatic variability such as potential for extreme events, seasonal changes),	6	1	1.1.1, 1.1.3	-	1-1 to 1-14, 1-26 to 1-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. A conceptual and numerical hydrogeological model that discusses the hydrostratigraphy and groundwater flow systems should be presented,	6	2	2.1, 2.4.1, 2.4.2	-	2-1 to 2-28, 2-30 to 2-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. Characterization of faults and fractures within the mine area, including information about occurrence, hydraulic conductivity testing and interpretation,	6	2	2.1	-	2-1 to 2-28

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. A description of interactions between permafrost, surface water and ground water, and topography, as well as rock fractures and talik zones between different surface/ground waters.	6	2	2.1	-	2-1 to 2-28
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. A description of permafrost/talik distribution, permeability and hydraulic conductivity of the underlying materials, and	5 6	3 2	3.1 2.1	-	3-1 to 3-16 2-1 to 2-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. A description of existing groundwater regimes, distribution characteristics and flow paths in the Project area, including any instances of frozen groundwater within/around the identified deposits.	6	2	2.1	-	2-1 to 2-28
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.6.2 Impact Assessment	The Proponent is required to present a comprehensive impact analysis for all Project components and activities, including its shipping activities where applicable, on hydrology and hydrogeology. This analysis should include the following:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. Discussion of the potential impact of variable and extreme stream-flows on Project design and planning, including how the design and size of proposed watercrossings would ensure adequate flow capacity to accomodate spring freshet and storm flows (e.g. 1 in 100 year or greater storm events). This should include migration contingencies if the watercrossing does not function as intended,	6 9 11	1, 4, 5 2 4	1.5.2, 4.5.2, 5.5.2 2.6 4.2.5	-	1-44, 4-38 to 4-43, 5-24 to 5-28 2-13 to 2-14 4-13
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Potential impacts to existing watersheds from surface water diversions required by mine site development and other Project components (e.g. waste rock stockpiles),	6	1	1.5	-	1-41 to 1-52
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Evaluation of stormwater runoff throughout the LSA, with consideration for potential impacts to receiving waters (e.g. flow rates and flow patterns),	6 9	1 2	1.1, 1.5.2 2.6	-	1-14 to 1-31, 1-44 to 1-53 2-14
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Potential impacts to natural drainage patterns from the construction and operation of proposed mine facilities and Project infrastructure,	6	1	1.5	-	1-41 to 1-52
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Potential impacts on terrestrial and aquatic wildlife habitat resulting from the modification or redirection of natural flows,	5	4 , 5, 6, 7, 8, 9, 10	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Potential for ice damming and resultant effects on other resources,	6 9 10	6.7 2 14	6.5.2, 7.5.2 2.8, 2.14.1 8.4	-	6-62, 7-38 2-14, 2-18 to 2-19 14-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. An assessment of each watercrossing and in-stream work, and potential impacts to the navigability and safety of the watercourses,	2 10	6 5, 14	6.4.3, 6.5, 6.6, 6.7.2 8.2.2, 4.2.4, 4.3, 7.1, 7.2	-	6.7 to 6.8, 6.12 to 6.14, 6.15, 6-19, 6-39 to 6-40 5-18 to 5-19, 14-13 to 14-14, 14-16 to 14-18
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Potential changes to permafrost and ground ice conditions as a result of Project activities, including an analysis of the potential for groundwater inflow into the open pit, and	5 6 11	2 2 4, 6, 7	2.4 2.4 4.1, 4.2, 4.3, 6.7, 6.9, 7.2, 7.8	-	2-28 to 2-29 2-30 to 2-31 4-7, 4-13, 4-16 to 4-20, 4-30 to 4-39, 6.5, 6.8, 7-5, 7-15 to 7-16
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. Potential changes to permafrost/talik distribution, groundwater distribution and flow paths.	5 6	2 2	2.4 2.4	-	2-28 to 2-29 2-30 to 2-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.7 Groundwater and Surface Water Quality	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.7.1 Baseline Information	i. Identification of all sources of drinking water (surface and groundwater), as well as water used for recreational purposes, within the area of influence of the project,	6	4	4.2, 4.11.1	-	4-30 to 4-31, 4-63 to 4-66
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A description of the natural hydrogeochemistry of groundwater system (i.e. pH, redox potential, total dissolved solids, isotopic composition, dissolved oxygen, dissolved metals anions and cations),	6	2	2.1	-	2-2 to 2-29
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. A description of the physical and chemical characteristics of groundwater and surface water in the LSA, with discussion of seasonal variations of water flow and quality. Chemical characteristics should include baseline levels of contaminants and should be compared to relevant water standards/guidelines with identification of those which are naturally elevated,	6	2, 4	2.1, 4.1.5, 4.1.6	-	2-2 to 2-29, 4-17 to 4-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. A discussion of waters in the LSA of importance to local harvesting activities by surrounding communities,	6	6, 7	6.2.1, 7.2.1	-	6-46 to 6-48, 7-28 to 7-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. A description of lake bathymetry and limnology in the LSA, and	6	3, 6	3.1, 6.1	-	3-1 to 3-17, 6-1 to 6-46
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Provision of an outline of baseline water quality conditions within the watershed and the project area, including a summary of baseline data collected with summary statistics and detection limits identified,	6	4	4.1.4.2, 4.1.5, 4.1.6	-	4-4 to 4-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. Provision of 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.	5 6	2 2	2.1 2.1	-	2-1 to 2-27 2-1 to 2-28
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Provision of 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.	6	2	2.1	-	2-1 to 2-28, 2-30, Appendix V6-2A, V6-2B
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Provision of 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.	6	2	2.1	-	2-1 to 2-28, 2-30, Appendix V6-2A, V6-2B
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. Provision of hydraulic conductivity data for hydrogeologic units in the study area.	6	2	2.1	-	2-1 to 2-28

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. Provision of a detailed groundwater budget.	6	2	2.4.2	-	2-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xi. Inclusion of a discussion of groundwater interactions with surface water bodies in the area.	6	2	2.1	-	2-1 to 2-28
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.7.2 Impact Assessment	The Proponent is required to present a comprehensive impact analysis for all Project components and activities, including its shipping activities where applicable, on groundwater and surface water quality. This analysis should include the following:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. Identification and provision of details on the specific contaminants of potential concern to the Project, the project activity to which they are related, the rationale for selecting them and for determining which will be carried forward into the impact assessment,	6 7 8	4, 5 2, 3 6	4.5.1, 4.5.2, 5.5.1, 5.5.2 2.5.1, 2.5.2, 3.5.1, 3.5.2 6.4.1.9, 6.4.2.9	-	4-35 to 4-45, 5-21 to 5-30 2-16 to 2-26, 3-12 to 3-22 6-70, 6-123
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Provision of predicted increases in contaminants in groundwater and surface water as a result of the Project, specifically identifying any waterbodies used as drinking water sources, for recreational purposes, that are important to local harvesting, the fish bearing status of identified waterbodies as well as specifically identifying any other fish bearing waterbodies. For any water sources identified as being current or future drinking water sources, comparison of concentrations of contaminants to relevant territorial drinking standards/guidelines and/or Health Canada Drinking Water Guidelines (Health Canada, 2010),	6 8	4, 2, 6, 7 6	4.11 (FW drinking water), 4.1, 4.2, 4.5, 2.2, 2.4.1, 6.1, 6.2, 7.1, 7.2 6.1.2, 6.1.4, 6.4.2.11	-	4-63, 4-1 to 4-31, 4-35 to 4-63, 2-28 to 30, 6-1 to 6-49, 7-1 to 7-31 6-3, 6-4, 6-142
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Potential impacts on groundwater quality and surface water quality in surrounding lakes and rivers from surface runoff and seepage, traffic on Project roads, and from dust from road traffic,	6	2, 4	2.4.1, 4.5	-	2-30, 4-35 to 4-56
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Potential impacts on water quality due to under ice water withdrawals,	6	4	4.5.2.2, 4.5.2.5, 4.5.3.2, 4.5.3.5	-	4-43 to 4-44, 4-48 to 4-50
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Potential impacts on groundwater quality and surface water quality of surrounding lakes, rivers, and streams from discharges of Project waste water treatment plants. A solute transport model based on numerical groundwater flow modelling should be used for ground water quality predictions and appropriate models selected (with rationale) to predict:	-	-	-	Numerical groundwater flow and solute transport modelling was not conducted, as the interaction of the Project with groundwater is expected to be limited.	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Water quality from specific sources,	6	2, 4	2.2, 2.4.2, 4.2, 4.5.2.9, 4.5.3.9	-	2-28, 2-31, 4-30 to 4-31, 4-45, 4-53
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Water quality discharged to the environment, and	2 10	6 3	6.4.13, 7.10.2, 7.10.3, 7.10.4 3.3, 3.6.8	-	6-11, 7-39 to 7-47 9, 10
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Dispersion, dilution and assimilation of effluent discharged to the environment,	2 10	6, 7 3	6.4.13, 7.10.2, 7.10.3, 7.10.4 3.3, 3.6.8	-	6-11, 7-39 to 7-47 9, 10
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Potential impacts on groundwater quality and surface water quality from dust, ARD and ML resulting from waste rock stockpiles, ore stockpiles, open pit and underground mine dewatering, construction fills, embankment of roads, and open quarry sites,	6	2, 4	2.4.1, 4.5	-	2-30, 4-35 to 4-56
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. Potential impacts of faults on contaminant transport processes in subsurface and surface water quality,	6 9 10	2 2 7	2.1.2.2, 2.1.2.3 2.3 3.6.3	-	2-15 to 2-19, 2-27 to 2-28 2-7 7-23
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Potential impacts on surface water quality of nearby lakes and streams as a result of nutrient input from blasting activities,	2 6 10	6 4 16	6.6.6.3 4.5.2.1, 4.5.2.7, 4.5.3.7 6	-	6-23 4-43, 4-45, 4-51 10-11
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. Potential for increases in suspended sediments in waterbodies as a result of construction and maintenance of the mine facilities, all-weather road and associated water crossings,	6	4	4.5.2.1, 4.5.2.3, 4.5.2.6, 4.5.3.1, 4.5.3.3, 4.5.3.6, 4.5.4.1, 4.5.4.2, 4.5.5	-	4-43 to 4-44, 4-46 to 4-51, 4-53 to 4-56
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. Potential impacts on surface/ground water quality from runoff at fuel storage facilities, with consideration for possible fuel spills and malfunctions,	6 9 10	4 3 5	4.5.2.8, 4.5.3.8 3.4.1.1 8.2.2	-	4-45, 4-52 3-8 5-18 to 5-19
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xi. Potential impacts on ground and surface water quality from accidental spills of fuel and chemicals along the ground transportation routes,	6 9	4 3, Appendix V9-3A	4.5.2.8, 4.5.3.8 3.4.1.2, 3.4.1.3, 3.4.2, 3.4.3	-	4-45, 4-52 3.8 to 3.10, Appendix V9-3A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xii. Potential impacts on surface water quality from the deposition of particulate matter resulting from the incomplete combustion of wastes from incineration,	6	4	4.5.2.8, 4.5.3.8	-	4-45, 4-52
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xiii. Potential impacts on groundwater and surface water quality in relation to other site waste management activities, including: storage, handling, waste deposition in landfills, landfarming of contaminated soil or runoff, the management of historical contaminated material (e.g. previous spills, mishaps, releases), and sewage effluent discharges,	2 6	6 4	6.6, 8.10 4.5.2.3, 4.5.3.3, 4.5.4.2, 4.5.5	-	6-15, 6-25, 8-6 4-44, 4-49, 4-54 to 4-56
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xiv. Potential impacts on surface water quality from construction and operation of camps,	6	4	4.5.2.1, 4.5.2.3, 4.5.2.8, 4.5.3.1, 4.5.3.3, 4.5.3.8, 4.5.4.1, 4.5.4.2, 4.5.5	-	4-43 to 4-49, 4-53 to 4-56
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xv. Potential impacts of erosion associated with the all-weather road on surface water quality as a result of vegetation removal, cuts/fills and other surface disturbances,	6	4	4.5.2.1, 4.5.3.1, 4.5.4.1, 4.5.5	-	4-43, 4-46 to 4-48, 4-53 to 4-54, 4-56

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xvi. Potential impact of ongoing exploration activities on surface water quality from drilling water withdrawals and returns,	6	4	4.5.2.4, 4.5.2.5, 4.5.3.4, 4.5.3.5, 4.5.4.3, 4.5.5	-	4-44, 4-49, 4-50, 4-55 to 4-56
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xvii. Outline proposed surface water quality objectives to maintain within the watershed and project area throughout life of project. Outline anticipated impacts (and cumulative effects) to surface and groundwater quality in the watershed.	6	2, 4	2.4.1, 4.5.4, 4.5.5, 4.6, 4.8, 4.9	-	2-30, 4-53 to 4-62
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.8 Sediment Quality	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:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.8.1 Baseline Information	i. A description of the physical and chemical characteristics of sediment in the LSA,	6 7	5 3	5.1 3.1	-	5-1 to 5-17 3-1 to 3-10
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A description of sedimentation rates and dispersion patterns in waterbodies of the LSA, and	6	5	X.1	-	5-1 to 5-17
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. For the sedimentation deposition rates, flow models and sediment dispersion models should be provided which outline the rate and location of sediment deposition where relevant. Provide linkage of this baseline information with the hydrology baseline information (Subsection 8.1.6.1).	6	5	X.1	not required due to lack of Project sediment-laden discharge	5-1 to 5-17
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.8.2 Impact Assessment	The Proponent is required to present a comprehensive impact analysis for all Project components and activities, including its shipping activities where applicable, on sediment quality. This analysis should include the following:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. Potential impacts on sediment quality in surrounding lakes and rivers from surface runoff and traffic on Project roads and dust from road traffic and other project sources,	6	5	5.5.2.1, 5.5.2.2, 5.5.2.3, 5.5.2.4, 5.5.2.6, 5.5.2.8, 5.5.3.1, 5.5.3.2, 5.5.3.3, 5.5.3.4, 5.5.3.6, 5.5.4.1, 5.5.4.2, 5.5.4.3, 5.5.5	-	5-28 to 5-39
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A discussion of fluvial processes and stability as related to proposed water crossings,	6	5	5.5.2.1, 5.5.3.1, 5.5.4.1, 5.5.5	-	5-28, 5-31 to 5-33, 5-36 to 5-37, 5-39
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Potential sedimentation and infill rates of drainage areas that might be impacted by the Project,	6	5	5.1.5	-	5-9 to 5-14
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Potential impacts on sediment quality of lakes and rivers from discharges of Project waste water treatment plants,	6	5	5.5	-	5-21 to 5-39
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Potential impacts on sediment quality from ARD and ML resulting from waste rock stockpiles, ore stockpiles, open pit dewatering, construction fills, embankment of roads, and open quarry sites,	6	5	5.5.2.1, 5.5.2.2, 5.5.2.3, 5.5.2.4, 5.5.3.1, 5.5.3.2, 5.5.3.3, 5.5.3.4, 5.5.4.1, 5.5.4.2, 5.5.4.3, 5.5.5	-	5-28 to 5-29, 5-31 to 5-34, 5-36 to 5-39
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Potential impacts of erosion associated with the all-weather road on sediment quality as a result of vegetation removal, cuts/fills and other surface disturbances,	6	6	5.5.2.1, 5.5.2.3, 5.5.3.1, 5.5.3.3, 5.5.4.1, 5.5.4.3, 5.5.5	-	5-28 to 5-29, 5-31 to 5-33, 5-36, 5-38 to 5-39
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. Potential impacts on sediment quality of nearby lakes and streams as a result of nutrient input from blasting activities,	6	5	5.5.2.5, 5.5.3.5	-	5-29, 5-34 to 5-35
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Potential impacts on sediment from runoff at fuel storage facilities, with consideration for possible fuel spills and malfunctions,	6 9	5 3	5.5.2.6, 5.5.3.6 3.1, 3.2, 3.3, 3.4.1, 3.4.8, 3.4.10, 3.5, 3.6	-	5-29, 5-35 to 5-36 3-1 to 3-12
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. Potential impacts on sediment quality from the deposition of particulate matter resulting from the incomplete combustion of wastes from incineration,	6	5	5.5.2.6, 5.5.2.8	-	5-29, 5-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. Potential impacts to sediment quality in relation to other site waste management activities, including: the storage, handling, waste deposition in landfills, landfarming of contaminated soil or runoff, the management of historical contaminated material (e.g. previous spills, mishaps, releases), as well as sewage effluent discharges, and	6	5	5.5.2.2, 5.5.3.2, 5.5.4.2, 5.5.5	-	5-28, 5-33, 5-37 to 5-39
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xi. Potential impacts on sediment quality from construction and operation of camps.	6	5	5.5.2.1, 5.5.2.2, 5.5.2.7, 5.5.2.8, 5.5.3.1, 5.5.3.2, 5.5.3.7, 5.5.4.1, 5.5.4.2, 5.5.5	-	5-28 to 5-33, 5-36 to 5-39
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.9 Freshwater Aquatic Environment	For the purpose of the current Guidelines, freshwater aquatic environment includes aquatic ecology, aquatic biota (including representative fish as defined in the <i>Fisheries Act</i> , benthic invertebrates, and other aquatic organisms) and habitat including fish habitat as defined in the <i>Fisheries Act</i> :	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.9.1 Baseline Information	i. A description of the limnology, freshwater biota, presence of fish and other freshwater species, associated habitats and habitat distribution in the RSA and the LSA with emphasis on species that perform particularly significant ecological functions. This description should be based on the results of baseline information collected from studies, available published information and/or information resulting from community consultations,	6	6, 7	6.1.6, 6.1.7, 6.2.1, 7.1.6,7.1.7, 7.2.1	-	6-30 to 6-45, 6-46 to 6-48 7-18 to 7-27, 7-28 to7-30

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A description of the biological composition of freshwater aquatic environments in the LSA, including: trophic state, periphyton, phytoplankton, zooplankton, benthic invertebrates, fish, and the interactions and relative significance of each trophic level identified in the food chain,	6	6, 7	6.1.6, 6.1.7, 7.1.6, 7.1.7	-	6-30 to 6-45, 7-18 to 7-27
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Description and population distribution of fish species in the LSA with a focus on arctic char, lake trout, and arctic grayling, 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,	6	7	7.1.1, 7.1.6, 7.1.7, 7.2.1	-	7-1 to 7-3, 7-18 to 7-27, 7-28 to 7-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Characterization of habitat requirements for each fish species, including areas used for spawning, rearing, feeding and over-wintering, and any sensitive times for these activities,	6	6, 7	6.1.1, 6.1.6, 6.1.7, 7.1.1	-	6-1, 6-30 to 6-45, 7-1 to 7-3
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Description of existing freshwater habitat in waterbodies and watercourses 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.) the estimated productive capacity, etc.,	6	3, 6	3.1, 6.1.6, 6.1.7	-	3-1 to 3-14, 6-30 to 6-45
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. An overview of fish species, populations, distributions and ecologies in the RSA, with emphasis on identified fish VECs and species with special designations (Species at Risk listed on Schedule 1 of the federal SARA and species with designations by the COSEWIC) or any populations of any rare or regionally unique fish species and habitats within both the LSA or RSA. This description should include reference to species having significant ecological functions, and/or importance for Inuit life and culture,	6	7	7.1, 7.2	-	7-1 to 7-27, 7-28 to 7-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. The health of fish VEC indicator species populations and their contaminant loadings, and	6 8	7 5, 6	7.1.6, 7.1.7, 7.1.8 Appendix V8-5A, 6.1.4,6.4.1.13	-	7-18 to 7-28 Appendix V8-5A, 6-5 to 6-6, 6-89
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. A discussion of any other issues relating to freshwater aquatic species or habitat identified through public consultation.	3 6	1 6, 7	1.6.1, 1.6.3 6.5.3, 6.8, 6.9, 7.5.3, 7.8, 7.9	-	Table 1.6-1 (page 1-40) 6-63 to 6-67, 6-67 to 6-71, 7-39 to 7-44, 7-46 to 7-50
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.9.2 Impact Assessment	The Proponent is required to present a comprehensive impact analysis for all Project components and activities, including its shipping activities, on the freshwater aquatic environment. This analysis should include the following:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. Potential impacts to fish, invertebrates, and freshwater habitat including potential impacts to water and sediment quality. Consideration should be given to impacts associated with the following: water withdrawals, discharge, redirection of natural flows, explosives use, nutrient and contaminant inputs, and sewage and grey water effluent discharge,	6	1, 4, 5, 6, 7	1.5, 4.5, 5.5, 6.5, 7.5	-	1-41 to 1-49, 4-35 to 4-56, 5-21 to 5-39, 6-53 to 6-67, 7-35 to 7-44
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Potential direct or indirect effects on fish and invertebrate biota and habitat of both, including aquatic Species at Risk, from any changes to the aquatic or riparian environments, as a result of any in-water works or Project activities in close proximity to waterbodies,	6	1, 4, 5, 6, 7	1.5, 4.5, 5.5, 6.5, 7.5	-	1-41 to 1-49, 4-35 to 4-56, 5-21 to 5-39, 6-53 to 6-67, 7-35 to 7-44
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Potential impacts to fish due to blasting in or near waterbodies, including noise and vibration impacts,	6	7	7.5.2.3, 7.5.3.3, 7.5.4, 7.5.5, 7.10	-	7-39, 7-42 to 7-46, 7-50 to 7-51
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Potential impacts to fish and fish habitat from any infilling of lake, wetland or stream habitats associated with road construction(s),	6	6	6.5.2.1, 6.5.3.1, 6.5.4, 6.5.5, 6.6.2, 6.7, 6.10	-	6-56 to 6-62, 6-63 to 6-64, 6-67, 6-72
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Potential impacts to freshwater fish, invertebrates and habitat from planned containment structures (e.g., sediment control structures and fuel containment structures) and potential accidental spills,	6 9	6 3	6.5.2.3, 6.5.3.3 3.4.1, 3.4.2, 3.4.3, 3.4.4	-	6-63, 6-65 to 6-67 3-8 to 3-10
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Potential impacts on identified fish habitat critical for spawning, rearing, nursery and feeding, seasonal migration, winter refuges and migration corridors,	6	6, 7	6.5.2.1, 6.5.2.2, 6.5.3.1, 6.5.3.2, 6.5.4, 6.5.5, 6.6.2, 6.7, 6.10, 7.5.2.1, 7.5.2.2, 7.5.3.1, 7.5.3.2, 7.5.4, 7.5.5, 7.6.2, 7.7, 7.10	-	6-56 to 6-65, 6-67, 6-72, 7-37 to 7-46, 7-50 to 7-51
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. An evaluation of the ability of fish to pass at water crossings along access roads taking into consideration periods of extreme low and extreme high stream flows,	6	6	6.5.2.1, 6.5.3.1, 6.5.4, 6.5.5, 6.6.2, 6.7, 6.10	Streams crossings will be built to DFO operational statements, ensuring fish-passage is retained.	6-56 to 6-64, 6-67, 6-72
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Potential impacts to fish health, distributions and populations especially taking in to consideration contamination and fugitive dust and potential impact to human health due to consumption of these fish,	6 8	7 5, 6	7.5.2, 7.5.3, 7.5.4, 7.5.5, 7.6.2, 7.7, 7.10 5.5.2.2, 5.5.4, 6.4.2.9.4	-	7-36 to 7-46, 7-50 to 7-51 5-21 to 5-26, 5-31 to 5-43, 6-128 to 6-134
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. Potential impacts on contamination of traditional foods as a result of bioaccumulation, i.e. food chain uptake through air, water and soil, including a discussion of proposed monitoring,	6 8	7 5, 6	7.10 5.5, 5.8, 5.9, 6.4.1, 6.4.2, 6.4.4	-	7-50 to 7-51 5-19 to 5-44, 6-18 to 6-143, 6-156
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. Discussion of the management measures for minimizing/mitigation of disturbances to fish populations, including measures to reduce the potential for establishment of invasive species in the area,	6	6, 7	6.5.3, 6.8, 7.5.3, 7.8	-	6-63 to 6-67, 6-67 to 6-71, 7-39 to 7-44, 7-46 to 7-49
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xi. Environmental receptivity-including ecological, physical and/or climatic factors that influence exposure to harmful substances, and	6	4	4.5, 4.6	-	4-35 to 4-58
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xii. Quantitative assessment of the ecological risks to freshwater VECs from the potential elevated contaminant loadings as a result of the Project.	8	5, 6	5.5.4.2.2, 6.4.1.3.2, 6.4.1.4.1, 6.4.1.7.1, 6.4.1.7.2, 6.4.1.7.3, 6.4.1.7.4, 6.4.1.8, 6.4.1.9, 6.4.2.8, 6.4.2.9, 6.4.2.12	-	5-36 to 5-37, 6-23, 6-24, 6-37 to 6-80, 6-114 to 6-134, 6-142
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.10 Vegetation		-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.10.1 Baseline Information	i. A description of ecological zones, and other relevant classifications of plant associations and phenologies in the LSA,	5	4	4.1	-	4-1 to 4-17

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A description of the vegetation/plant types in the LSA, including estimated percentage cover and height for principal species, with a discussion on their particular significant ecological functions and/or their importance to wildlife and humans,	5	4	4.1	-	4-1 to 4-17
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. An overview of vegetation species, populations, distributions and ecologies in the RSA, with emphasis on identified vegetation VECs and species with special designations (Species at Risk listed on Schedule 1 of the federal SARA and species with designations by the COSEWIC). This description should include reference to species having significant ecological functions, and/or importance for Inuit life and culture including TK collected related to plants and plant use in the RSA,	5 8	4, 5 5	4.1, Appendix V5-4A, Appendix V5-5A 5.1.1, 5.5.2.3, 5.5.4.3	-	4-1 to 4-17, Appendix V5-4A, Appendix V5-5A 5-2 to 5-4, 5-26, 5-42
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Details regarding associations between vegetation cover types and soil types in the LSA,	5 8	4, 5 5	4.1, 4.2, 4.3, Appendix V5-4A, Appendix V5-5A 5.1.1, 5.5.2.3, 5.5.4.3	Rare Plant Assessmement in Appendix V5-4A	4-1 to 4-22, Appendix V5-4A, Appendix V5-5A 5-2 to 5-4, 5-26, 5-42
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. A presentation of available published information and/or information resulting from TK studies regarding identified VECs,	5	4	4.1, Appendix V5-4A	-	4-1 to 4-17, Appendix V5-4A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. A discussion of the health status of plant species or communities in the LSA, including baseline information on contaminant levels (including metals) in representative species consumed by wildlife and/or humans, either directly (humans eating plants) or indirectly (humans consuming wildlife), and other vegetation that reflects sensitivity to contaminants or environmental pathways of exposure and biomagnification, and	5	4	4.2	-	4-17 to 4-19
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. Any other issues related to vegetation as identified through public consultation.	3 5 8	1 4 5, 6	1.6.1, 1.6.3 4.1 5.1, Appendix V8-5A, 6.1, 6.4.1, 6.4.2	-	Table 1.6-1 4-1 to 4-17 5-1 to 5-12, Appendix V8-5A, 6-1 to 6-13, 6-18 to 6-143
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.10.2 Impact Assessment	The Proponent is required to present a comprehensive impact analysis for all Project components and activities, including its ground and marine based transportation activities, on vegetation. This analysis should include the following:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. Potential impacts to abundance and diversity of vegetation due to Project activities,	5	4	4.5	-	4-26 to 4-60
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Potential impacts to specific vegetation coverage and species composition from construction, operation, and reclamation activities in the Project area,	5	4	4.5	-	4-26 to 4-60
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. An assessment of the potential loss, disturbance, and/or changes to vegetation abundance, diversity, and forage quality as a result of Project components and activities, including potential effects from airborne fugitive dust fall, airborne contaminants from emission sources, and changes to water quality and quantity, permafrost, or snow accumulation,	4 8	4 6	4.5 6.1, 6.4.1	-	4-26 to 4-62 6-1 to 6-12, 6-18 to 6-89
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Potential impacts on vegetation abundance and diversity from the transfer/introduction of invasive or exotic species into the LSA via Project equipment and vehicles, including aircraft and marine vessels,	5	4	4.5.2.2	-	4-29 to 4-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Potential impacts on vegetation quality due to soil erosion, structural soil changes, soil contamination, and fugitive dust and gaseous air emissions from mining, milling and waste management activities,	4 8	4 6	4.5.2.2 6.1, 6.4.1	-	4-29 to 4-31 6-1 to 6-12, 6-18 to 6-89
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. A 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),	N/A	N/A	N/A	The Country Foods assessment did not identify any risks that would be associated with predicted changes to vegetation. The proposed Air Quality Monitoring Program will monitor for potential contaminates to vegetation. Hence no vegetation monitoring is proposed at this time.	N/A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. A 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,	2 5	8 4	8.14 4.5.3, 4.8	-	8-8 to 8-9 4-31 to 4-33, 4-68 to 4-70
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Potential impacts on contamination of traditional foods as a result of bioaccumulation, i.e. food chain uptake through air, water and soil,	8	5, 6	5.1, Appendix V8-5A, 6.1, 6.4.1, 6.4.2	-	5-1 to 5-12, Appendix V8-5A, 6-1 to 6-13, 6-18 to 6-143
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. Potential impact from the loss or alteration of habitat (i.e. vegetation) due to pollutants and noise and its effects on wildlife, wildlife calving grounds and marine habitat, and	5 7	4, 5, 6, 7, 8, 9, 10 6, 7	4.5.2.1, 4.5.2.2, 4.5.3, 5.5.2.1, 5.5.2.2, 6.5.2.1, 6.5.2.2, 7.5.2.1, 7.5.2.2, 8.5.2.1, 8.5.2.2, 9.5.2.1, 9.5.2.2, 10.5.2.1, 10.5.2.2 6.5.2.1, 6.5.2.2, 7.5.2.1, 7.5.2.2	-	4-29 to 4-62. 5-88 to 5-101, 6-41 to 6-52, 7-24 to 7-37, 8-37 to 8-53, 9-35 to 9-46, 10-26 to 10-39 6-24 to 6-28, 7-19 to 7-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. A discussion of the potential of invasive vegetative species (weedy species) from shipping along the shore line and from transportation along the all-weather road.	5	4	4.5.2.2	-	4-29 to 4-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.11 Terrestrial Wildlife and Wildlife Habitat	For the purpose of the current Guidelines, terrestrial wildlife and wildlife habitat includes representative terrestrial mammals including: caribou (including habitat, migration, and behaviour), muskoxen, wolverine, polar bears, brown bears (including brown and grizzly bears), wolves and less conspicuous species that may be maximally exposed to contaminants, and wildlife migration routes and crossings.	5	5, 6, 7, 8	All, Appendices V5-5A, V5-5B, V5-5C, V5-5D, V5-5E, V5-6A	Appendices V5-5A, V5-5B, V5-5C, V5-5D, V5-5E, V5-6A	All, Appendices V5-5A, V5-5B, V5-5C, V5-5D, V5-5E, V5-6A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.11.1 Baseline Information	i. A description of wildlife populations, distributions and ecologies in the RSA, with emphasis on identified wildlife VECs and species with special designations (Species at Risk listed on Schedule 1 of the federal SARA and species with designations by the COSEWIC). This description should include reference to species having significant ecological functions, and/or of importance for Inuit life and culture,	5	5, 6, 7, 8	5.1, 5.2, 6.1, 6.2, 7.1, 7.2, 8.1, 8.2	-	5-1 to 5-77, 6-1 to 6-13, 7-1 to 7-14, 8-1 to 8-27

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. A description of biodiversity within the RSA, and associated food chain relationships among terrestrial wildlife species,	5	5, 6, 7, 8	5.1.2.4, 5.1.3.4, 6.1.4, 7.1.4, 8.1.4	-	5-18 to 5-20, 5-59, 6-3 to 6-8, 7-3, 8-6 to 8-8
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Presentation of available published information and/or information resulting from TK studies regarding identified VECs, including: the relative seasonal and annual trends in abundance and distributions, the estimated productive capacity, migratory patterns and associated corridors/routes, critical habitats on or in LSA and RSA, and sensitive periods,	5	5, 6, 7, 8	5.1, 6.1, 7.1, 8.1	-	5-1 to 5-73, 6-1 to 6-13, 7-1 to 7-7, 8-1 to 8-11
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. A description of the population health of identified VECs, with a discussion of contaminant loadings in representative species important to Inuit as a food source, such as caribou,	5 7 8	5, 6, 7, 8, 9, 10 6, 7 5, 6	5.1.2.3, 5.1.3.3, 6.1.2, 7.1.2, 8.1.2, 9.1.2, 10.1.2 6.1.2, 7.1.2 5.1.1, 5.1.2, 5.1.3, Appendix V8-5A, 6.1, 6.4.1, 6.4.2, 6.4.4	Appendix V8-5A	5-17, 5-59, 6-1 to 6-3, 7-1 to 7-2, 8-1 to 8-3, 9-1 to 9-2, 10-1 to 10-2 6-1 to 6-2, 7-1 to 7-2 5.2 to 5.6, Appendix V8-5A, 6-5 to 6-12, 6-18 to 6-89, 6-89 to 6-143, 6-156 to 6-157
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Details regarding habitats within the LSA which are important for forage, shelter and reproduction of wildlife VECs, including terrestrial and aquatic habitats (e.g. sea ice, freshwater and marine waters),	5	5, 6, 7, 8	5.1.2.4, 5.1.3.4, Appendix V5-5A, 6.1.4, 7.1.4, 8.1.4	Appendix V5-5A	5-18 to 5-20, 5-59 to 5-60, Appendix V5-5A, 6-3 to 6-8, 7-3, 8-6 to 8-8,
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Identification of key wildlife habitats in the LSA and RSA as applicable, including: National Parks, Critical Wildlife Areas, Territorial Parks and other areas with legislated protection, eskers, caribou calving and nursing areas, denning sites, staging areas, and special locations as salt licks, insect relief habitats, and areas used by females and their young. Related discussion should also include migration routes, water course crossings, travel corridors and areas important for Inuit harvesting,	5	5, 6, 7, 8	5.1, 6.1.3 to 6.1.5, 7.1.3 to 7.1.5, 8.1.3 to 8.1.5	-	5-1 to 5-74, 6-3 to 6-19, 7-2- 7-12, 8-5 to 8-23,
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. Identification of habitats of any rare or sensitive species, such as Species at Risk, or those with similar designations or federal and territorial status,	5	5, 6, 7, 8	5.1.2.4, 5.1.2.5, 5.1.3.4, 5.1.3.5, 5.1.4.4, 6.1.4, 6.1.5, 7.1.4, 7.1.5, 8.1.4, 8.1.5	-	5-18 to 5-50, 5-59 to 5-61, 5-73 to 5-74, 6-3 to 6-19, 7-3 to 7-12, 8-6 to 8-23
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. A description of the migratory patterns and routes of terrestrial wildlife VECs and the corresponding periods when these routes would be affected by the Project,	5	5, 6, 7, 8	5.1.2.2, 5.1.3.2, 5.1.4.2, 6.1.3, 7.1.3, 8.1.3	-	5-3 to 5-16, 5-50 to 5-58, 5-62 to 5-66 6-3, 7-2 to 7-3, 8-5 to 8-6
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. Discussion of the relative health of VEC populations, including contaminant loading in representative wildlife VEC species (i.e. caribou),	8	5, 6	Appendix V8-5A, 6.1, 6.4.1, 6.4.2, 6.4.4	-	Appendix V8-5A, 6-5 to 6-12, 6-18 to 6-89, 6-89 to 6-143, 6-156 to 6-157
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. A description of the distribution and population levels of caribou in the RSA and LSA. Consideration should be given to the cyclic nature of caribou as well as the shifts in annual caribou ranges over time, with baseline information collection covering appropriate temporal and spatial scales for an accurate understanding of current population health,	5	5	5.1.2, 5.1.3, 5.1.4	-	5-3 to 5-73
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xi. Details regarding available information on potential impacts to wildlife associated with noise, vibrations, and dust and dust deposition from relevant scientific research and TK, and	3 5	1, 3 5, 6, 7, 8	1.6.3.3, Appendices V3-1C, V3-1G, V3-3B 5.5.2.1, 5.5.2.2, 6.5.2.1, 6.5.2.2, 7.5.2.1, 7.5.2.2, 8.5.2.1, 8.5.2.2	-	1-43 to 1-44, Appendices V3-1C, V3-1G, V3-3B 5-88 to 5-93, 6-41 to 6-44, 7-24 to 7-28, 8-37 to 8-41
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xii. Discussion of other pertinent issues as identified through public consultation.	3 5	1 5	1.6.1, 1.6.3 5.5.3, 5.8, 5.9	-	Table 1.6-1 (page 1-40) 5-108 to 5-112, 5-147 to 5-155
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.11.2 Impact Assessment	The Proponent is required to present a comprehensive impact analysis for all Project components and activities, including its shipping activities, on terrestrial wildlife and wildlife habitat. This analysis should include the following:	5	5, 6, 7, 8	5.5, 6.5, 7.5, 8.5	-	5-83 to 5-114, 6-35 to 6-62, 7-19 to 7-45, 8-30 to 8-65
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. Potential general impacts on terrestrial wildlife in the LSA, including: interference with migratory routes, alienation from important habitat (e.g. denning sites, calving and post-calving areas), habitat fragmentation and general disturbance or disruption caused by Project activities,	5	5, 6, 7, 8	5.5.2.2, 5.5.2.3, 6.5.2.2, 6.5.2.3, 7.5.2.2, 7.5.2.3, 8.5.2.2, 8.5.2.3	-	5-93 to 5-104, 6-44 to 6-53, 7-28 to 7-38, 8-41 to 8-55
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Potential impacts on population size, abundance, distribution and behaviour of wildlife VECs from:	5 8	5, 6, 7, 8 6	5.5, 6.5, 7.5, 8.5 6.4.1.8, 6.4.1.9, 6.4.1.10, 6.4.1.11	-	5-83 to 5-114, 6-35 to 6-62, 7-19 to 7-45, 8-30 to 8-65 6-58 to 6-88
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Direct and indirect loss of habitat from the presence of and use of infrastructure, the conduct of project activities and associated sensory disturbances,	5	5, 6, 7, 8	5.5.2.1, 5.5.2.2, 6.5.2.1, 6.5.2.2, 7.5.2.1, 7.5.2.2, 8.5.2.1, 8.5.2.2	-	5-88 to 5-94, 6-41 to 6-46, 7-24 to 7-29, 8-37 to 8-43
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Direct and indirect impacts from potential degraded water quality and ground contamination, as well as airborne contaminants resulting from project facilities and associated activities,	5 8	5, 6, 7, 8 6	5.5.2.7, 6.5.2.7, 7.5.2.7,8.5.2.7 6.4.1.8, 6.4.1.9, 6.4.1.10, 6.4.1.11	-	5-107, 6-55, 7-39, 8-57 6-58 to 6-88
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Direct and indirect impacts from potential ice-breaking (prior to spring break-up or following fall freeze-up) associated with shipping activities, and ice management at the port/dock facility,				No ice breaking planned	
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Direct and indirect impacts from climate change, and	4 5	3 5, 6, 7, 8	3.4.1.2 5.5.2.8, 6.5.4.4, 7.5.4.3, 8.6.4.4	-	3-18 to 3-25 5-107 to 5-108, 6-61, 7-45, 8-86
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Where relevant, the Proponent shall take into account the alteration of normal behaviour or patterns and provide any associated outcomes for overall energy balance for the relevant VEC,	5	5, 6, 7, 8	5.5.2.8, 6.5.2.8, 7.5.2.8, 8.5.2.8	-	5-107 to 5-108, 6-55 to 6-56, 7-39 to 7-40, 8-57 to 8-58
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Potential impacts on wildlife from ground traffic and air traffic disturbance, particularly low level flights (i.e. lower than 610 metres) during critical periods (caribou calving and post-calving). For this impact assessment, a delineated flight impact zone could be useful in determining the potential impact of flights on wildlife, with a particular focus on critical life cycle periods and planned air traffic volume and routes,	5	5, 6, 7, 8	5.5.2.2, 6.5.2.2, 7.5.2.2, 8.5.2.2	-	5-93 to 5-101, 6-44 to 6-52, 7-28 to 7-37, 8-41 to 8-53
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Potential impacts on wildlife from injury or mortality caused by Project activities, particularly the use of the all-weather road, mine hauling roads and other access roads, as well as intentional killing of wildlife to defend human life or property by mine personnel,	5	5, 6, 7, 8	5.5.2.4, 5.5.2.5, 5.5.2.6, 6.5.2.4, 6.5.2.5, 6.5.2.6, 7.5.2.4, 7.5.2.5, 7.5.2.6, 8.5.2.4, 8.5.2.5, 8.5.2.6	-	5-104 to 5-107, 6-53 to 6-55, 7-38 to 7-39, 8-55 to 8-57

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Potential impacts on wildlife from increased hunting pressure resulting from improved access due to Project infrastructure,	5 8	5, 6, 7, 8 4	5.5.2.5, 6.5.2.5, 7.5.2.5, 8.5.2.5 4.7.2.1	-	5-105 to 5-106, 6-54, 7-39, 8-56 4-75 to 4-76
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Potential impacts of noise and vibration on wildlife from drilling, blasting and other activities as results of Project construction and operation,	5	5, 6, 7, 8	5.5.2.2, 6.5.2.2, 7.5.2.2, 8.5.2.2	-	5-93 to 5-101, 6-44 to 6-52, 7-28 to 7-37, 8-41 to 8-53
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. Assessment of the potential for Project activities to act as an attractant to wildlife species, and associated effect/changes to behaviour and condition,	5	5, 6, 7, 8	5.5.2.6, 6.5.2.6, 7.5.2.6, 8.5.2.6	-	5-106 to 5-107, 6-54 to 6-55, 7-39, 8-56 to 8-57
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Evaluation of the potential for contaminants to be released into the environment as a result of the Project and to be taken up by VEC species,	5 8	5, 6, 7, 8 6	5.5.2.7, 6.5.2.7, 7.5.2.7, 8.5.2.7 6.4.1.7	-	5-107, 6-55, 7-39, 8-57 6-36 to 6-58
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. Potential impacts of contamination to sources of traditional food (including those trapped, fished, hunted, harvested or grown for subsistence or medicinal purposes) as a result of bioaccumulation (i.e. food chain uptake through air, water and soil) as well as any proposed monitoring methods to track these potential impacts,	5 8	5, 6, 7, 8, 5, 6	5.5.2.7, 6.5.2.7, 7.5.2.7, 8.5.2.7 5.5.2.2.3, 5.5.4.2.4, 5.5.4.2.5, 5.5.4.3, 5.8, 6.4.1.7.1, 6.4.1.7.4, 6.4.1.8.6, 6.4.1.9.5, 6.4.1.11, 6.4.2.7.1, 6.4.2.7.4, 6.4.2.8.5, 6.4.2.9.4, 6.4.2.12	-	5-107, 6-55, 7-39, 8-57 5-25, 5-39 to 5-43, 6-37 to 6-38, 6-47 to 6-58, 6-69 to 6-70, 6-80, 6-88 to 6-89, 6-98 to 6-100, 6-107 to 6-114, 6-121 to 6-122, 6-128 to 6-134, 6-142 to 6-143
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. List of all potential contaminants and a determination of whether possible uptake of these contaminants into country foods will result from project activities.	8	6	6.4.1.7, 6.4.1.9, 6.4.2.7, 6.4.2.9	-	6-36 to 6-58, 6-70 to 6-80, 6-97 to 6-114, 6-123 to 6-134
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xi. Potential impacts from the loss or alteration of habitat (i.e. vegetation) due to pollutants and noise and any ancillary effects, and	5	4, 5, 6, 7, 8	4.5.2, 5.5.2.1, 5.5.2.2, 6.5.2.1, 6.5.2.2, 7.5.2.1, 7.5.2.2, 8.5.2.1, 8.5.2.2	-	4-28 to 4-31, 5-88 to 5-101, 6-41 to 6-52, 7-24 to 7-37, 8-37 to 8-53
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xii. Evaluation of the relative health and potential for chemical toxicity for inherently sensitive wildlife species based on an analysis of exposure pathways and demographic parameters.	5 8	5, 6, 7, 8 6	5.5.2.7, 6.5.2.7, 7.5.2.7,8.5.2.7 6.4.1.7, 6.4.1.10, 6.4.1.11, 6.4.2.7, 6.4.2.12	-	5-107, 6-55, 7-39, 8-57 6-36 to 6-58, 6-80 to 6-89, 6-97 to 6-114, 6-142
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.12 Birds and Bird Habitat	For the purpose of the current Guidelines, discussion relating to birds shall include raptors, migratory birds, marine birds and the associated habitat of each.	5 7	9, 10 6	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.12.1 Baseline Information	i. An overview of bird species, populations, distributions and ecologies in the RSA, with emphasis on identified bird VECs and species with special designations (Species at Risk listed on Schedule 1 of the federal SARA and species with designations by the COSEWIC). This description should include reference to species having significant ecological functions, and/or importance for Inuit life and culture,	5 7	9, 10 6	9.1, 10.1 6.1	-	9-1 to 9-25, 10-1 to 10-15 6-1 to 6-13
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Description of current habitat use by VECs, including the use of Migratory Bird Sanctuaries, Key Migratory Bird Sites, Territorial Parks and other important habitats (e.g. breeding, nesting sites, staging areas) in the RSA and along the proposed shipping routes,	5 7	9, 10 6	9.1,10.1 6.1, 6.11	-	9-1 to 9-25,10-1 to 10-15 6-1 to 6-13, 6-51 to 6-57
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Description of the relative seasonal/annual abundances, distributions and trends in range or habitat use, movements and population status of bird VECs, including but not limited to population abundance, reproductive success, mortality rates, density, diversity, etc.,	5 7	9,10 6	9.1,10.1 6.1, 6.11	-	9-1 to 9-2510-1 to 10-15 6-1 to 6-13, 6-51 to 6-57
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Description of migratory patterns and routes of VECs potentially impacted by the Project, with a discussion of corresponding sensitive periods, and	5 7	9,10 6	9.1.4, 9.1.5,10.1.4, 10.1.5 6.1.4, 6.1.5, 6.11	-	9-4 to 9-25,10-3- to 10-15 6-3 to 6-13, 6-51 to 6-57
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Identification of key migratory bird sites along the shipping route, including those which could potentially be affected by marine spills as a result of current and/or wind patterns.	7 9	6 3	6.1, 6.11 Appendix V9-3A	-	6-1 to 6-13, 6-51 to 6-57 Appendix V9-3A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.12.2 Impact Assessment	The Proponent is required to present a comprehensive impact analysis for all Project components and activities, including its shipping activities, on birds. This analysis should include the following:	5 7	9, 10 6	9.5, 10.5 6.5	-	9-30 to 9-54, 10-21 to 10-48 6-18 to 6-35
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. Description of the potential loss, alteration or isolation of habitat (e.g. staging and nesting habitats) as a result of the Project development. Special consideration should be given to Species at Risk listed on Schedule 1 of the federal SARA, species with designations by the COSEWIC, species having significant ecological functions or importance for Inuit life and culture,	5 7	9, 10 6	9.5.2, 10.5.2 6.5.2	-	9-35 to 9-49, 10-24 to 10-43 6-22 to 6-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Potential disruption or alteration of migration routes due to Project phases or activities,	5	9, 10	9.5.2.3, 10.5.2.3	-	9-46, 10-39
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Where relevant, the Proponent shall account for alteration of normal behaviour or patterns and provide any associated outcomes for overall energy balance for the relevant VEC,	5 7	9, 10 6	9.5.2.8,10.5.2.8 6.5.2.6	-	9-49, 10-42 to 10-43 6-31 to 6-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Potential impacts on birds and bird habitat use from air contamination, vegetation contamination, ground contaminants or degraded water quality,	5 7 8	9, 10 6 6	9.5.2.7,10.5.2.7 6.5.2.5 6.4.1.7, 6.4.1.11	-	9-49,10-41 6-31 6-36 to 6-58, 6-88
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Potential disturbances to birds from noise and vibrations as a result of blasting, and land and marine transportation,	5 7	9, 10 6	9.5.2.2,10.5.2.2 6.5.2.2	-	9-40 to 9-46, 10-28 to 10-39 6-25 to 6-28
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Potential impact from pre-determined Flight Impact Zones, and potential for collision with aircraft,	5 7	9, 10 6	9.5.2.2, 9.5.2.4, 10.5.2.2, 10.5.2.4 6.5.2.2, 6.5.2.3	-	9-40 to 9-46, 9-47, 10-28 to 10-40 6-25 to 6-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. Potential for Project facilities to attract wildlife such as polar bear, brown and grizzly bear, wolverine, foxes, ravens and gulls that may prey upon migratory birds and resulting impacts on the migratory bird populations,	5	9, 10	9.5.2.5, 10.5.2.5	-	9-47 to 9-48, 10-40

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Potential attraction of birds and other scavengers/predators by domestic waste at camp sites,	5	9, 10	9.5.2.6, 10.5.2.6	-	9-48 to 9-49, 10-40 to 10-41
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. Potential attraction of birds to Project facilities and infrastructure for roosting and nesting sites,	5	9, 10	9.5.2.6,10.5.2.6	-	9-48 to 9-49, 10-40 to 10-41
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. Potential for bird mortality due to collisions with tall structures, overhead wires or guy wires,	5	9, 10	9.5.2.4, 10.5.2.4	-	9-47, 10-39 to 10-40
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xi. Potential effects of shipping on coastal and marine birds and habitat, as well as potential disturbance on key migratory bird habitat areas and sanctuaries in proximity to shipping routes in the NSA,	7	6	6.5.2.2, 6.11	-	6-25 to 6-28, 6-51 to 6-57
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xii. Incidental spills, malfunctions and other accidents associated with shipping operations and potential impacts to marine birds,	9	3	3.4.1, 3.4.2, 3.4.3, 3.4.7, Appendix V9-3A	Appendix V9-3A (Marine Bird Habitat and Potential Diesel Spills)	3-8 to 3-10, Appendix V9-3A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xiii. Potential interactions, accidental injuries and mortality of marine birds directly or indirectly from proposed shipping (open water and potential ice breaking during break-up in the spring and freeze-up in the fall) activities, in particular those marine birds which congregate in areas where the shipping routes would pass through,	7	6	6.5.2.2, 6.5.2.3, 6.5.2.4, 6.5.2.5, 6.5.2.6	-	6-25 to 6-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xiv. Potential direct and indirect effects on marine bird behaviour, distribution, abundance, migration patterns, species health and reproduction from marine shipping,	7	6	6.5.2.2, 6.5.2.3, 6.5.2.4, 6.5.2.5, 6.5.2.6	-	6-25 to 6-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xv. Evaluation of the potential for contaminants to be released to the environment from marine shipping and taken up by marine bird VECs as a result of the Project,	7 8	2, 6 6	2.5.2, 6.5.2.5 6.4.1.7, 6.4.1.8, 6.4.1.9, 6.4.1.10	-	2-20 to 2-26, 6-31 6-36 to 6-87
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xvi. Assessment of potential cumulative effects on marine bird VECs resulting from escalated marine traffic in the RSA over the mining lifecycle, including the potentially extended minimum operation period. Consideration should be given to the possible significant increase of marine vessel traffic along shipping routes,	7	6	6.6.2.1	-	6-38 to 6-40
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xvii. Potential impacts of contaminant bioaccumulation via food chain uptake through air, water and soil, including specific impacts to traditional food sources including potential monitoring methods to track the progress of this potential impact, and	5 7 8	9, 10 6 5, 6	9.5.2.7, 10.5.2.7 6.5.2.5 5.5.2.2.3, 5.5.4.2.4, 5.5.4.2.5, 5.5.4.3, 5.8, 6.4.1.7.1, 6.4.1.7.4, 6.4.1.8.6, 6.4.1.9.5, 6.4.1.11, 6.4.2.7.1, 6.4.2.7.4, 6.4.2.8.5, 6.4.2.9.4, 6.4.2.12	-	9-49, 10-41 6-31 5-25 to 5-26, 5-39 to 5-43, 6-37 to 6-38, 6-47 to 6-58, 6-69 to 6-70, 6-80, 6-88, 6-98 to 6-100, 6-107 to 6-114, 6-121 to 6-122, 6-128 to 6-134, 6-142
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		xviii. Potential impacts from the loss or alteration of habitat (i.e. vegetation) due to pollutants and noise and its effects on bird and bird habitat.	5 7 8	4, 9, 10 6 6	4.3.2.1, 4.3.2.2, 4.5.2.2, 9.5.2.1, 9.5.2.2, 10.5.2.1, 10.5.2.2 6.5.2.1 6.4.1.7.1, 6.4.1.7.2, 6.4.1.7.3, 6.4.1.7.4, 6.4.3.7, 6.4.3.10.1, 6.4.3.11.1	-	4-21 to 4-25, 4-30 to 4-31, 9-35 to 9-46, 10-26 to 10-39 6-24 to 6-25 6-37 to 6-58, 6-146, 6-151, 6-154
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.13 Marine Environment	For the purposes of the current Guidelines, the marine environment shall include marine ecology, marine water and sediment quality, and marine biota including fish, Species at Risk, and marine habitat.	7	All	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.13.1 Baseline Information	i. Description of marine physical processes and currents including the costal environment, biological diversity and composition, and associated interactions in the LSA and RSA, including the proposed shipping route(s) within the NSA,	7	1, 4, 5, 6, 7	All, , 4.1, 5.1, 6.1, 6.11, 7.1, 7.11	-	All, 4-1 to 4-30, 5-1 to 5-11, 6-1 to 6-7, 6-51 to 6-57, 7.1 to 7-5, 7-42 to 7-49
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Data on seasonal ice cover including timing of ice freeze-up and break-up for the proposed shipping routes,	7	1	1.1.4, 1.1.5	-	1-10 to 1-27
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Presentation of available bathymetric information along the proposed shipping route(s),	7 9	1 3	1.1 (Figure 1.1-1) Appendix V9-3A	-	1-1 to 1-30 Appendix V9-3A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Identification of sensitive habitat areas for marine fish, anadromous fish and marine mammals along the shipping route(s), and	7	4, 5, 7	4.1, 4.2, 5.1, 5.2, 7.1, 7.2, 7.11	-	4-1 to 4-33, 5-1 to 5-15, 7-42 to 7-49
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Presentation of TK collected related to coastal areas and ice conditions.	3 7	1, 3 1, 4, 5, 6, 7	Appendices V3-1C, V3-1G, V3-3A 1.2, 4.2, 5.2, 6.2, 7.2	-	Appendices V3-1C, V3-1G, V3-3A 1-31 to 1-32, 4-30 to 4-33, 4-12 to 4-15, 6-13 to 6-16, 7-7 to 7-10
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.13.2 Impact Assessment	The Proponent is required to present an impact analysis that gives consideration to the potential for Project shipping activities to impact the marine environment. This analysis shall include the following:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. Potential risks and impacts to the marine ecosystem through the introduction of exotic species, including pathogens, through seasonal shipping,	7	5	5.5.2.2, 5.5.3.2, 5.5.4, 5.5.5, 5.6.2, 5.6.5, 5.7, 5.10	-	5-22, 5-23 to 5-27, 5-31 to 5-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Potential impacts on marine water quality from accidental spills of fuel and chemicals along the shipping routes and from the accidental grounding/stranding of marine vessels along the shipping routes,	9	3	Appendix V9-3A	-	Appendix V9-3A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Potential impacts on marine water quality and sediment quality from discharges of Project waste water treatment plants. A solute transport model based on numerical flow modelling should be used for water quality predictions and appropriate models selected, with rationale, to predict:	7	2, 3	2.5.2.6, 2.5.3.6, 3.5.2.6, 3.5.3.5	Numerical groundwater flow and solute transport modelling was not conducted, as the interaction of the Project with groundwater is expected to be limited.	2-26, 2-33 to 2-34, 3-22, 3-26 to 3-27
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Water quality discharged to the environment, and	7	2	2.5	-	2-16 to 2-38
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		o Dispersion, dilution and assimilation of effluent discharged to the environment,	7 10	2 7	2.5 All	-	2-16 to 2-38 All

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. An assessment of the effects of Project activities (i.e. effluent discharge, accommodation barge, loading docks, etc.) on fish and fish habitat of Bathurst Inlet,	7	4, 5	4.5, 5.5	-	4-36 to 4-43, 5-19 to 5-25
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Potential impacts of wake effects from shipping on the shoreline stability and sensitive fish or marine mammal habitat (i.e. coastal wetlands),	7	2, 3, 4, 5	2.5.2.1, 2.5.3.1, 2.5.4.1, 3.5.2.1, 3.5.3.1, 3.5.4.1, 4.5.2.2, 4.5.3.2, 4.5.4, 4.6.2, 4.7, 4.10, 5.5.2.2, 5.5.3.2, 5.5.4, 5.5.5, 5.6.2, 5.6.5, 5.7, 5.10	-	2-24, 2-26, 2-34, 3-19, 3-23, 3-27, 4-41, 4-43, 4-46, 5-22 to 5-25, 5-27, 5-31 to 5-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Potential impacts on sedimentation patterns and subsequent impacts on subsea permafrost in the nearshore region,	7	3	3.5.4.2	-	3-28
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. Potential impacts of sedimentation from propeller wash on water quality, fish and fish habitat and, benthic invertebrates,	7	2, 4, 5	2.5.2.1, 2.5.3.1, 2.5.4.1, 2.5.5 4.5.2.2, 4.5.3.2, 4.5.4, 4.6.2, 4.7, 4.10, 5.5.2.2, 5.5.3.2, 5.5.4, 5.5.5, 5.6.2, 5.6.5, 5.7, 5.10	-	2-24, 2-27 to 2-30, 2-34 to 2-35, 2-37 to 2-38, 4-41 to 4-43, 4-46 to 4-47, 5-22 to 5-27, 5-31 to 5-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Potential impacts of ballast water discharge on water quality, fish and fish habitat, benthic invertebrates including cumulative impacts over the life of the Project,	7	2 5	2.5.2.1 5.5.2.2, 5.5.3.2, 5.5.4, 5.5.5, 5.6.2, 5.6.5, 5.7, 5.10	-	2-24 5-22 to 5-27, 5-31 to 5-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ix. Potential impact on marine environment and bio-accumulation in marine food chains, in particular on benthic organisms, from antifouling toxins (e.g. tributyltin) leaching from marine vessels, and	7	2, 3, 4, 5	2.5.2.1, 2.5.3.1, 3.5.2.1, 3.5.3.1, 4.5.2.1, 4.5.3.1, 5.3.2, 5.5.2, 5.10	-	2-24, 2-27 to 2-30, 3-19 to 3-20, 3-23, 4-40 to 4-42, 5-15 to 5-16, 5-20 to 5-22, 5-31 to 5-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		x. Potential impacts of climate change and sea level change on Project elements.	9	2	2.10, 2.11, 2.12, 2.13, ,2.14, 2.15, 2.16	-	2-15 to 2-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.14 Marine Wildlife		-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.14.1 Baseline Information	i. A description of marine wildlife populations, distributions and ecologies in the RSA, with emphasis on identified marine wildlife VECs and species with special designations (Species at Risk listed on Schedule 1 of the federal SARA and species with designations by the COSEWIC). This description should include reference to species having significant ecological functions, and/or of importance for Inuit life and culture,	7	6, 7	6.1, 6.11, 7.1, 7.11	-	6-1 to 6-13, 6-51 to 6-57, 7-1 to 7-7, 7-42 to 7-49
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Characterization of marine wildlife habitat in the LSA, including habitat used by VECs for feeding, calving, nursing, over-wintering, and other critical activities, and	7	6, 7	6.1, 6.11, 7.1, 7.11	-	6-1 to 6-13, 6-51 to 6-57, 7-1 to 7-7, 7-42 to 7-49
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Identification of marine wildlife species, historical and current habitats, distribution, seasonal migration patterns, critical areas (i.e. feeding, calving, over wintering, etc.), and potential interactions with shipping activities.	7	6, 7	6.1, 6.11, 7.1, 7.11	-	6-1 to 6-13, 6-51 to 6-57, 7-1 to 7-7, 7-42 to 7-49
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT	8.1.14.2 Impact Assessment	The Proponent is required to present an impact analysis that gives consideration to the potential for Project shipping activities to impact the marine wildlife. The Proponent shall, where any impact to marine wildlife is identified, indicate the cultural or practical importance of that species to northerners. In addition, the analysis shall include the following:	7	6, 7	6.5.2, 7.5.2	-	6-22 to 6-35, 7-17 to 7-33
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		i. Potential loss to or deterioration in the habitat of marine wildlife VECs due to shipping route(s). Special consideration should be given to Species at Risk listed on Schedule 1 of the federal SARA, species with designations by the COSEWIC, species having significant ecological functions, and/or of importance for Inuit life and culture,	7	6, 7	6.5.2.1, 6.5.2.2, 7.5.2.1, 7.5.2.2	-	6-24 to 6-28, 7-19 to 7-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		ii. Potential direct and indirect impacts to marine wildlife, marine fish and marine habitat from marine shipping activities including increased noise levels,	7 10	6, 7 6, 15	6.5.2.2, 7.5.2.2 7.4, 11	-	6-25 to 6-28, 7-21 to 7-30 6-21 to 6-23, 15-15 to 15-16
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iii. Potential spills, malfunctions and other accidents associated with shipping operations and any resulting impacts to marine wildlife, marine habitat and marine fish,	9	3	3.4.1, 3.4.3, 3.4.7, Appendix V9-3A	-	3-8 to 3-10, Appendix V9-3A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		iv. Risk assessment of the potential introduction of non-native aquatic species due to ballast water discharge, ship wash and hull fouling,	7 8	5 6	5.5.2, 5.5.3.2, 5.5.4, 5.5.5, 5.6, 5.7, 5.10 6.4.1.10	-	5-20 to 5-27, 5-31 6-80 to 6-87
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		v. Potential interactions, accidental injuries and mortality of marine wildlife directly or indirectly from proposed shipping (open water and potential ice breaking during break-up in the spring and following freeze-up in the fall) activities, in particular those marine wildlife which congregate in areas where the shipping routes would pass through,	7	6 7	6.5.2.3, 6.5.2.6, 7.5.2.2, 7.5.2.3, 7.5.2.6	-	6-28 to 6-32, 7-21 to 7-33
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vi. Potential direct and indirect effects on marine wildlife behaviour, distribution, abundance, migration patterns, species health and reproduction from marine shipping activities,	7	6 7	6.5.2 7.5.2	-	6-22 to 6-35 7-17 to 7-33
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		vii. Evaluation of the potential for contaminants to be released to the environment and taken up by VECs as a result of the Project, and	8	6	6.1, 6.4.1, 6.4.2	-	6-1 to 6-13, 6-18 to 6-143
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.1 BIOPHYSICAL ENVIRONMENT AND IMPACT ASSESSMENT		viii. Assessment of potential residual and cumulative effects on marine wildlife VECs resulting from escalated marine traffic in the RSA over the mining lifecycle (and including the potentially extended mine operation period). Consideration should be given to the possible significant increase of marine vessel traffic along shipping routes.	7	6, 7	6.6, 7.6	-	6-35 to 6-44, 7-36
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		The Proponent shall present baseline information on the functioning and stability of the socio-economic environment in the RSA (see Section 7.3), with a corresponding impact assessment covering all Project phases of development (construction, operations, temporary closure, final closure, and post-closure).	8	3, 4	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		The Proponent shall describe the components of the socio- economic environment and the processes affecting them as they exist without the Project. This will serve as a baseline against which the potential changes and impacts of the Project can be measured and will also justify the Proponent's selection of VSECs and indicators.	8	3, 4	3.1, 4.1	-	3-1 to 3-14, 4-1 to 4-20

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		The Proponent shall provide a clear rationale for its selection of communities, the public consultation carried out, and relevant reference studies and reports from which baseline data is collected.	3 8	1 3, 4	1.3, 1.4 3.1, 3.4, 4.1, 4.4	-	1-5 to 1-12, 1-212 to 1-19 3-1 to 3-22, 3-36 to 3-37, 4-1 to 4-21, 4-31 to 4-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		In its impact assessment, the Proponent shall describe and assess the interactions between the socio-economic and biophysical environments, including the roles of the land and wage-based economies and the nature of a mixed economy in the North. The discussion should reflect a proper understanding of the structure and functioning of the potentially affected societies in order to identify the potential of the Project to affect them, whether positively or negatively, and to ensure that any socio-economic mitigation measures put in place by the Proponent have a reasonable likelihood of attaining their objectives.	8	3, 4	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		The Proponent shall also provide discussions of items (Topics for Discussion) which are essential to capturing the overall socio-economic analysis but are beyond the responsibility of the Proponent to resolve in terms of the existing socio-economic conditions found within the Kitikmeot Region, Nunavut or Yellowknife, Northwest Territories.	8	3, 4	3.5, 4.5	-	3-37 to 3-92, 4-32 to 4-58
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		Whenever relevant and appropriate, data shall be disaggregated by age, gender, ethnic affiliation, community, and territorial, provincial, and federal region.	8	3, 4	3.1, 4.1	-	3-1 to 3-22, 4-1 to 4-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		Socio-economic indicators are used to present baseline information and subsequently measure impacts related to the proposed project, those indicators selected must be adequate to address all types of foreseeable impacts, including cumulative and residual. The EIS shall clearly identify and justify the Proponent’s selection of indicators, identify when and on which VSEC the potential impacts may manifest.	8	3, 4	-	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		The Proponent is expected to clearly identify limitations and knowledge gaps encountered in its efforts to collect the information required by the following sections of these Guidelines.	8	3, 4	3.1, 4.1	-	3-1 to 3-22, 4-1 to 4-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.1 Economic Development and Opportunities	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.1.1 Baseline Information	i. The traditional economy, current economic structure including the interaction between the wage and traditional economy, development trends in the Project RSA and variability in potential impacted communities as well as in Nunavut as a whole,	8	4	4.1	-	4-1 to 4-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		ii. The economic development levels in the Project RSA comparing to other regions in Nunavut, advantages and constraints of economy development,	8	3	3.1	-	3-1 to 3-22
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iii. The roles the exploitation of renewable resources (e.g., subsistence and commercial hunting and fishing) play in economic terms and its significance for the local economy,	8	4	4.1	-	4-1 to 4-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iv. Community and resident self-reliance, and	8	3	Appendix V8-3A	-	Appendix V8-3A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		v. Overview of Nunavut’s Real Gross Domestic Product, rate of Gross Domestic Product (GDP) growth, Consumer Price Index, import/export and trade balance of goods, personal savings rate, and business investment.	8	3	3.1	-	3-1 to 3-22
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.1.2 Impact Assessment	i. Potential impact on the local economy from regional level and community level as well as the implications of the Project on economic diversity,	8	3	3.5	-	3-37 to 3-92
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		ii. Potential impact on the traditional economic activities including hunting, fishing and sport hunting/guiding, etc.,	8	4	4.5	-	4-32 to 4-58
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iii. Potential impacts related to accessibility and removal of barriers for traveling, fishing, hunting/trapping and other activities by local communities as a result of construction and operation of the all-weather road,	8	4	4.5	-	4-32 to 4-58
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iv. Potential impacts on local and regional economy due to temporary closure and final closure, and	8	3	3.5.3	-	3-43 to 3-69
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		v. Provide a discussion on the effects that the Project may have on Nunavut’s Real Gross Domestic Product, rate of GDP growth, Consumer Price Index, import/export and trade balance of goods, personal savings rate, and business investment.	8	3	3.5	-	3-37 to 3-92

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.2 Employment	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.2.1 Baseline Information	i. The labour supply statistics in terms of relative genders, ages and other demographic categories,	8	3	3.1	-	3-1 to 3-22
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		ii. An assessment of the current local and national labour force available to satisfy the needs of the Project development at each phase, identifying gaps between this availability and project needs by education level and other categories that may help to identify barriers and needs, including a discussion of the availability of Canadian labour and the potential need for foreign employees to address any gap in meeting project labour needs,	8	3	3.1.2, 3.5	-	3-1 to 3-22, 3-37 to 3-92
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iii. Local household incomes, income sources, and compositions of income within the Project RSA,	8	3	3.1.2.2	-	3-3 to 3-5
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iv. Provision of sector specific breakdown of employment within the NSA and as pertains to Yellowknife, NT,	8	3	Appendix V8-3A	-	Appendix V8-3A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		v. Existing local employment opportunities and labour supply status, and	8	3	3.1.2.2	-	3-3 to 3-5
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		vi. A discussion of the requirements for employment (e.g. education levels, criminal records, drug and alcohol policies, language abilities), and the potentials of needs to be met by local recruitment, as well as the extent to which the skills of the available workers match job requirements.	8 10	3 28	3.1, 3.8 All	-	3-1 to 3-22, 3-110 to 3-113 All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.2.2 Impact Assessment	i. An assessment of the potential for development of the local labour force,	8	3	3.1, 3.5.3.3, 3.8	-	3-1 to 3-22, 3-64 to 3-67, 3-110 to 3-113
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		ii. A discussion of culturally-sensitive workforce management practices that will meet both the Project's immediate labour force needs as well as the region's longer-term economic development needs,	8 10	3 28	3.8 All	-	3-110 to 3-113 All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iii. A discussion of potential changes in the traditional activities and household function due to wage employment associated with the Project,	8	3, 4	3.5.3.5, 4.5.2.2	-	3-73 to 3-83, 4-42 to 4-51
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iv. An evaluation of the effects of competition for labour between the Project and existing businesses, institutions, and traditional activities, and	8	3, 4	3.5.3.3, 3.5.6.1, 3.7.2.1, 4.5.2.1, 4.5.2.2	-	3-73 to 3-83, 3-89, 3-107, 4-37 to 4-51
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		v. Potential impacts on employment due to situations of Project temporary and final closure.	8	3	3.5.3.3	-	3-27 to 3-69
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.2.3 Topics of Discussion	i. Evaluation of the possible effect of changes in income earnings on patterns of savings expenditure and consumption values, especially with changes to public housing rental requirements due to changes of employment status.	8	3	3.5.3.5	-	3-73 to 3-83
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.3 Education and Training	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.3.1 Baseline Information	i. An overview of the existing education system (early childhood through post-secondary),	8	3	3.1.2.3	-	3-5 to 3-7
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		ii. Available training programs for adults and youth through the existing education system,	8	3	3.1.2.3	-	3-5 to 3-7
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iii. Local education infrastructure, capacity, funding resources, and administration system,	8	3	3.1.2.3, 3.1.2.6	-	3-5 to 3-7, 3-11 to 3-14
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iv. Education and skill levels of the residents in the Project RSA, and experience of the local labour force in different demographic categories based on available data.	8	3	3.1.2.3	-	3-5 to 3-7

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.3.2 Impact Assessment	i. An assessment of Project impacts to the education system and how it would influence training programs. Include an evaluation on how the Project might affect attendance, retaining teachers, class sizes, and other components of the education system,	8	3	3.5, 3.3.2	-	3-37 to 3-92, 3-26 to 3-36
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		ii. Provision of an assessment on the demands that might be placed on the educational infrastructure, capacity, funding resources and administration system,	8	3	3.5, 3.3.2	-	3-37 to 3-92, 3-26 to 3-36
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iii. Requirements for education levels, skills and experiences of labour force from the Project in short, medium term and foreseeable future, taking account the vision of expansion for the Project lifespan, and regional economy development,	8	3	3.3, 3.5	-	3-24 to 3-36, 3-37 to 3-92
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iv. A discussion of potential need of local labour force training to meet the needs of the Project. The types of training can be those specifically required by the Project, or others geared toward universally applicable skills that improve workers' opportunities in other sectors of the local economy. This assessment shall include predicted training resources and predicted resources needed to meet the designed training programs, if applicable,	8	3	3.8	-	3-110 to 3-113
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		v. An evaluation of training programs planned by the Proponent, the associated challenges and likelihood of success of trainees to satisfy the Project needs and regional economy development with consideration of cultural and language barrier,	8 10	3 24, 28	3.8 All	-	3-110 to 3-113 All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		vi. A discussion of the potential for longer term community capacity building programs, if any have been planned or will be planned and are anticipated to be implemented throughout the Project's lifetime, regarding how mine training plans can enhance the transferability of skills after the mine closure (e.g. management and HR skills, computer skills, heavy equipment experience, finance skills, etc.), and	8 10	3 24, 28	3.5.3.4, 3.8 All	-	3-69 to 3-73, 3-110 to 3-113 All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		vii. A discussion of other possible solutions to fill up the gap between requirements of project needs, and education level and qualifications of local labour force.	8	3	3.5.3.4	-	3-69 to 3-73
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.4 Contracting and Business Opportunities	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.4.1 Baseline Information	i. Provision of the most up-to-date statistics and data available as it relates to contracting and business opportunities from socio-economic studies of communities in the Project RSA,	8	3	3.1	-	3-1 to 3-22
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		ii. Estimates of goods supplied to the Project, including country food supply for Inuit workers at the mine, procurement, services contracting, and other business opportunities in the Project RSA that may result from the Project, and	8	3	3.5	-	3-37 to 3-92
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT		iii. The economy structure and characteristics of the local and regional economies, existing business types, scales of the different sectors of economy, and potential capacities to meet the needs of the Project.	8	3	3.1	-	3-1 to 3-22
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.4.2 Impact Assessment	i. An assessment of economic effects, positive and negative, stemming from the Project's contracting and business opportunities through the lifespan of the Project,	8	3	3.5.3.2	-	3-54 to 3-57
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.4.2 Impact Assessment	ii. Opportunities for local, regional, and territorial businesses to supply goods and services both directly to the Project, and indirectly to meet the demand created by the expenditure of new income by employment in the Project,	8	3	3.5.3.2	-	3-54 to 3-57
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.4.2 Impact Assessment	iii. An assessment of the Project effects on other local and regional economic sectors, in particular the competition to other business' needs due to limited capacity of local business,	8	3	3.5, 3.6.2.1	-	3-37 to 3-92, 3-99 to 3-100
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.4.2 Impact Assessment	iv. An assessment of the contributions made to public, communities and Inuit from the Project,	8 10	3 26	3.5 All	-	3-37 to 3-92 All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.4.2 Impact Assessment	v. An assessment of the project-related procurement, and potential capacity to meet Project needs,	8	3	3.5.3.1, 3.5.3.2, 3.5.3.3	-	3-43 to 3-69
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.4.2 Impact Assessment	vi. A discussion on barriers to local business capacity building,	8 10	3 24	3.1.2.5, 3.5, 3.8 All	-	3-9 to 3-11, 3-37 to 3-92, 3-110 to 3-113 All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.4.2 Impact Assessment	vii. An assessment of existing country food supply sources from the Project region and Nunavut, and opportunities to supply country foods for Inuit workers at the Project,	8 10	4 28	3.3.2.3 3.1.2	-	3-32 to 3-36 28-3 to 28-4

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.4.2 Impact Assessment	viii. An assessment of opportunities for local communities to diversify their economic sources and to supply new goods and services to meet the need generated by the Project, and	8	3	3.5.3.2	-	3-54 to 3-57
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.4.2 Impact Assessment	ix. Potential impacts on local businesses and services due to temporary closure and final closure.	8	3	3.5.3.2	-	3-54 to 3-57
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.5 Population Demographics	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.5.1 Baseline Information	i. A description of regional and local community populations, demographics structure, composition, characteristics and population trends, and	8	3	3.1.2.1	-	3-2 to 3-3
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.5.1 Baseline Information	ii. A discussion of observed variations in education levels, dietary habits, religious characteristics and other social aspects in different demographic categories in the RSA.	8	3, 4	X.1	-	3-1 to 3-22, 4-1 to 4-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.5.2 Impact Assessment	i. Potential for project-induced demographic changes in population, migration, (including in-migration from outside of Nunavut), population re- distribution or movement of Nunavummiut between communities and the effects of those changes, and further details on potential interactions between local residents and non-residents,	8	3	3.3.2.1	-	3-27 to 3-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.5.2 Impact Assessment	ii. Potential effects of fly-in/fly-out employment on population demographics, and,	8	3	3.3.2.1	-	3-27 to 3-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.5.2 Impact Assessment	iii. Potential effects from various Project phases, including unemployment as a result of temporary suspension of operations or mine closure.	8	3	3.5.3.3	-	3-57 to 3-69
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6 Traditional Activity and Knowledge	For the purpose of the current Guidelines, traditional activity and traditional knowledge shall consider land use, food security, language, cultural activities and commercial harvesting.	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.1 Baseline Information	i. A description of cultural, ethnic, religious, and language characteristics and diversities in the RSA,	8	3, 4	X.1, X.2	-	3-1 to 3-24, 4-1 to 4-25
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.1 Baseline Information	ii. Local and regional economy characteristics in term of relation to traditional land use activities and wage incomes,	8	3, 4	3.1.2.7, 4.1.2.5	-	3-14 to 3-21, 4-7 to 4-20
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.1 Baseline Information	iii. Descriptions of the significance of, availability of, and level of dependence on, traditional foods as major nutritional sources by local residents within the Project RSA, including:	8	3, 4	3.1.2.7, 4.1.2.5	-	3-14 to 3-21, 4-7 to 4-20
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.1 Baseline Information	o What country foods are consumed, or are expected to be consumed in the Project RSA, which parts of country foods are consumed, and their consumption frequency, and	8	3, 4, 5, 6, Appendix V8-5A	3.1, 3.2, 4.1, 5.1.1, 6.1.8, 6.4.2.12	-	3-1 to 3-23, 4-1 to 4-21, 5-1 to 5-12, 6-11 to 6-12, 6-142, Appendix V8-5A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.1 Baseline Information	o Descriptions, including maps, of traditional and current hunting ranges and patterns in the LSA,	8 3	4 3	4.1 Appendix V3-3A	-	4-1 to 4-21 Appendix V3-3A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.1 Baseline Information	iv. Description of the use of caribou as a subsistence species, including harvesting, sustainable use of caribou, and the cultural and social activities associated therein, to specifically include hunting, community feasts, and the commissioning of arts and crafts, and	8	4	4.1.2.5	-	4-7 to 4-20
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.1 Baseline Information	v. Details regarding wildlife and vegetative species that are culturally valuable to northerners.	8	4	4.1.2.5	-	4-7 to 4-20
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.2 Impact Assessment	i. Potential effects of the Project on the accessibility of caribou and other terrestrial wildlife species to harvesters where such may be affected by reductions in habitat and herd sizes and/or expected changes to migration patterns or human travel routings. The risks to present and future generations of harvesters should also be considered,	8	4	4.5.2.2	-	4-42 to 4-51
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.2 Impact Assessment	ii. Potential impacts related to accessibility to areas for hunting, fishing, marine harvesting, traveling, recreational and religious activities as a result of the Project development, including a consideration of individual components such as all-weather roads and marine shipping,	8	4	4.5.2.2	-	4-42 to 4-51
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.2 Impact Assessment	iii. Potential effects on sustainable resource use, such as country food availability and accessibility of carving stone deposits, taking into account the CEA throughout the entire lifespan of the Project,	8	4	4.3.2	-	4-26 to 4-31

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.2 Impact Assessment	iv. Potential impacts to marine wildlife of cultural or practical importance to northerners,	8	4	4.3.2.1	-	4-27 to 4-29
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.2 Impact Assessment	v. Potential impacts to Aboriginal fisheries species, including fish of cultural or practical importance to northerners,	8	4	4.3.2.1	-	4-27 to 4-29
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.2 Impact Assessment	vi. Potential impacts to the ongoing productivity of local or regional commercial, recreational or Aboriginal fisheries,	8	4	4.3.2.2	-	4-29 to 4-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.2 Impact Assessment	vii. Potential impacts to vegetation of cultural or practical value to northerners,	8	4	4.3.2.2	-	4-29 to 4-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.2 Impact Assessment	viii. Description on how the Proponent will comply with the Official Languages Act, and	8	4	4.3.2.2	-	4-29 to 4-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.6.2 Impact Assessment	ix. Potential impacts that the contamination of traditional food sources, including those trapped, fished, hunted, harvested or grown for subsistence or medicinal purposes (i.e. berries, etc.), may have on individuals, families, communities, and the ability of Inuit to engage in traditional lifestyles.	8	5 6	5.5.2.3 6.4.2.12	-	5-26 6-142
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.7 Non-traditional Land Use and Resource Use	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.7.1 Baseline Information	i. A description of known non-traditional land and resource use including protected areas, visual and aesthetic resources,	8	4	4.1.2.2, 4.1.2.3, 4.1.2.4	-	4-2 to 4-7
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.7.1 Baseline Information	ii. Provision an overview of local and regional land use activities in the LSA as well as areas potentially impacted by shipping activities,	8	4	4.1.2.5	-	4-7 to 4-20
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.7.1 Baseline Information	iii. A description of current and traditional land use areas and the importance of those areas to Inuit culture and social well-being,	8 3	4 3	4.1.2.5 Appendix V3-3A	-	4-7 to 4-20 Appendix V3-3A
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.7.1 Baseline Information	iv. A description of known land use activities and relation to the local economy, self-reliance, food supplies and livelihood,	8	4	4.1.2.5	-	4-7 to 4-20
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.7.1 Baseline Information	v. A description of identified and anticipated overlapping zones and/or areas where the land use activities co-exist or interact with Project components and activities, and	8	4	4.5.2	-	4-42 to 4-51
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.7.1 Baseline Information	vi. A description of the current tourism activities and recreational use occurring in the Project region.	8	4	4.1.2.4	-	4-4 to 4-7
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.7.2 Impact Assessment	i. A description of impacts to known non-traditional land and resource use including protected areas, visual and aesthetic resources,	8	4	4.5.2.1	Visual modeling not conducted for the effects assessment.	4-37 to 4-42
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.7.2 Impact Assessment	ii. A discussion of anticipated interactions between project development and land use activities by local residents in the Project RSA, in particular at the mine site, all-weather road and shipping routes, and	8	4	4.5.2.2	-	4-42 to 4-51
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.7.2 Impact Assessment	iii. A description the potential impact on the tourism industry from the Project's development which may impair the wilderness experience of tourism in the Project RSA.	8	4	4.5.2.1	-	4-37 to 4-42
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.8 Heritage Resources	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.8.1 Baseline Information	i. A summary description of known archaeological/paleontological, burial, cultural and historic, sacred and spiritual sites within the LSA based on TK and scientific baseline studies. Each site shall be described on a map with a corresponding scale. Large-scale maps should be sent to the Government of Nunavut, Department of Culture and Heritage (GN-CH) upon request to assist in its review,	8	1	1.1, 1.2, Appendices V8-1A, V8-1B	-	1-1 to 1-12, Appendices V8-1A, V8-1B

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.8.1 Baseline Information	ii. A description of regulatory requirements and procedures for recovery and removal of artefacts and/or fossils in areas of proposed development, and	8	1	1.1.1	-	1-1
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.8.1 Baseline Information	iii. A description of the relationship between the cultural sites and social lives of local communities in the LSA.	8	1	1.1, 1.2, Appendices V8-1A, V8-1B	-	1-1 to 1-12, Appendices V8-1A, V8-1B
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.8.2 Impact Assessment	i. Potential impacts to archaeological and paleontological resources (e.g., burial sites, sacred sites), and other cultural sites within the LSA resulting from development of Project infrastructure including all-weather roads, mine sites, laydown areas, airstrips, etc.,	8	1	1.5	-	1-15 to 1-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.8.2 Impact Assessment	ii. Potential impacts on archaeological and paleontological resources from increased activity in the area associated with the mine including ground transportation and ongoing exploration as well as non-mine related activities,	8	1	1.5	-	1-15 to 1-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.8.2 Impact Assessment	iii. Potential impacts to archaeological and paleontological resources as a result of borrow pit and quarry construction and operation, as well as construction and use of access roads. Discussion of how considerations for potential impacts have been incorporated in the road routing and design should also be presented, and	8	1	1.5	-	1-15 to 1-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.8.2 Impact Assessment	iv. Potential impacts on cultural well-being, religious and spiritual activities which are related to cultural and historic, sacred and spiritual sites.	8	1	1.5	-	1-15 to 1-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9 Health and Wellbeing	For the purpose of the current Guidelines, discussions relating to individual and community wellness shall include family and community cohesion, as well as other indicators as may be selected by the Proponent.	8	3	3.3.2.2	-	3-31 to 3-32
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.1 Baseline Information	i. A description of the current individual and family well-being including a discussion on households, family and community stability,	8	3	3.1.2.7	-	3-14 to 3-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.1 Baseline Information	ii. A description of household social structures within the RSA, and where possible, the prevalent representative household social structure, including: the prevalent composition (family/kin-relations co-existing, generations in the household), the gender roles, the prevalent division of household labour based upon existing gender roles, the dominant consumption patterns, access to credit, and how resources are shared/divided within the household as well as how decisions are made in the household,	8	3	3.1.2.1	Detailed information on access to credit, division of household resources, and household decision-making not readily available.	3-2 to 3-3
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.1 Baseline Information	iii. A description of the current status of human health in the RSA, including mental, and psychological health, well-being, previous history and exposure, and identify vulnerable sub-groups where applicable, and	8	3	3.1.2.7	-	3-14 to 3-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.1 Baseline Information	iv. A description of nutritional requirements of residents in the RSA along with quantitative information on the diet habits of residents, including consideration of details such as the seasonal, gender and age-related consumption of country foods.	8	3, 4	3.1, 4.1.2.5	-	3-1 to 3-22, 4-7 to 4-20
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.2 Impact Assessment	i. A description of potential impacts to individual and family well-being from the Project,	8	3	3.5.3.5	-	3-73 to 3-83
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.2 Impact Assessment	ii. Potential impacts to household social structure from the Project (e.g. one or two family members working at the mine site),	8	3	3.5.3.5	-	3-73 to 3-83
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.2 Impact Assessment	iii. Potential effects on lifestyle, including the effects of a major employment base away from the communities,	8	3	3.5.3.5	-	3-73 to 3-83
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.2 Impact Assessment	iv. Potential effects on community and family stabilities, and culture integrity due to potential demographic changes,	8	3	3.5.3.5	-	3-73 to 3-83
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.2 Impact Assessment	v. Potential effects on individual, family and community health and wellbeing from workplace and community cross-cultural tension, conflict, and/or racism.	8	3	3.3.2.3	-	3-32 to 3-36
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.2 Impact Assessment	vi. Potential impacts on human mental and physical health and well-being within the RSA resulting from potential indirect effects of the Project. This discussion should give consideration to gambling, substance abuse, family violence, sexually transmitted infections and other communicable diseases,	8	3	3.5.3.5	-	3-73 to 3-83
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.2 Impact Assessment	vii. Potential impact on community, family and individual well-being as a result of increased access to alcohol and other controlled substances resulting from increased incomes as well as the potential movement of these substances through the Project site or via Project- related activities (i.e. stopovers or layovers),	8	3	3.5.3.5	-	3-73 to 3-83

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.2 Impact Assessment	viii. Potential impacts on human health associated with traditional lifestyles where large amounts of country foods are consumed, considering the bioaccumulation and take-up of contaminants associated with changes to the level of contaminants loadings in country foods (i.e. terrestrial and marine wildlife, fish, birds, and vegetation consumed by humans), and	8	5, 6	5.5.2.2.3, 5.5.4.2.4, 5.5.4.2.5, 5.5.4.3, 5.8, 6.4.2.7.4, 6.4.2.8.5, 6.4.2.9.4, 6.4.2.12	-	5-25 to 5-26, 5-39 to 5-42, 5-42, 5-42 to 5-43, 5-43 to 5-44, 6-107 to 6-114, 6-121 to 6-122, 6-128 to 6-134, 6-142
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.2 Impact Assessment	ix. Potential impacts to community well-being in the RSA.	8	3	3.5.3.5	-	3-73 to 3-83
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.3 Topics for Discussion	i. A description of current substance abuse issues including trends relating to the importation of drugs and alcohol, crime and violence, and other relevant social factors,	8	3	3.1.2.7	-	3-14 to 3-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.3 Topics for Discussion	ii. An overview of the current financial management programs available in the potentially affected communities,	8	3	3.3.2.3	-	3-32 to 3-36
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.3 Topics for Discussion	iii. A description of the current community well-being, including information about the capacity, availability, and affordability, where relevant, of local services and infrastructure (i.e. housing, training, education, day care services, health care, etc.),	8	3	3.1.2.6, 3.1.2.7	-	3-11 to 3-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.3 Topics for Discussion	iv. A description of local and regional community and cultural values and initiatives that promote and support regional and family health and cohesion.	8	3	3.1.2.7	-	3-14 to 3-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.3 Topics for Discussion	v. A description of increased pressure on existing social, institutional, and community services, facilities and services, and infrastructure,	8	3	3.3.2.3	-	3-32 to 3-36
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.3 Topics for Discussion	vi. Potential impacts to community safety and security, including indirect impacts on frequency and types of crime incidents, with consideration for a potential influx of Project personnel into local communities during the life of the Project,	8	3	3.3.2.3	-	3-32 to 3-36
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.3 Topics for Discussion	vii. Identification and discussion of potential impacts of the Project on accident rates, alcohol/prohibited substance consumption and import/export, and	8	3	3.5.3.5	-	3-73 to 3-83
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.9.3 Topics for Discussion	viii. A description of barriers to current financial management programs and any incentives that would be provided by the Proponent for healthy financial management.	8	3	3.5	-	3-37 to 3-92
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10 Community Infrastructure and Public Services	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.1 Baseline Information	i. Description of community, cultural and recreation programs,	8	3	3.1.2.6	-	3-11 to 3-14
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.1 Baseline Information	ii. Description of existing transportation modes and travel routes/roads,	8	3	3.1.2.6	-	3-11 to 3-14
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.1 Baseline Information	iii. Discussion of costs to build infrastructure, transportation costs, and effect on public services,	8	3	3.1.2.6	-	3-11 to 3-14
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.1 Baseline Information	iv. Description of existing communication systems and services and utilities,	8	3	3.1.2.6	-	3-11 to 3-14
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.1 Baseline Information	v. Description of community & regional waste management systemsDescription of current conditions of local supply and demand of housing, including private, public and rental housing and their costs, other infrastructure, and related capacity within the RSA,	8	3	3.1.2.6	-	3-11 to 3-14
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.1 Baseline Information	vi. Description of existing public services and associated community facilities in the RSA, including law enforcement, health care, emergency response, dependency assistance, welfare utilities, temporary accommodation and food services, and	8	3	3.1.2.7	-	3-14 to 3-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.1 Baseline Information	vii. Description of existing outpost camps and other facilities outside of municipal boundaries which facilitate harvesting and recreation activities in the LSA, particularly within the proximity of the Project.	8	4	4.1.2.5	-	4-7 to 4-20

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.2 Impact Assessment	i. A discussion of demand for community infrastructure and public services from the Project directly and indirectly,	8	3	3.3.2.1	-	3-27 to 3-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.2 Impact Assessment	ii. An assessment of the effects on services and/or infrastructure (including housing) in public and private sectors, due to the potential use by the Project directly or indirectly, including those caused by Project-induced demographic changes, noting that where the assessment determines an impact, the Proponent should outline proposed mitigation measures,	8	3	3.3.2.1	-	3-27 to 3-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.2 Impact Assessment	iii. An assessment of potential increased demand on the local and regional health care systems, including the standard medical system, emergency response and emergency medical care, medevac services, and challenges raised by any increased demand,	8	3	3.3.2.1	-	3-27 to 3-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.2 Impact Assessment	iv. A discussion of building new and updating existing structures including weather shields and outposts beyond the boundary of communities and along hunting/traveling routes, and/or at hunting grounds which may facilitate local hunting activities/traveling in Project areas,	8	3	3.3.2.1	-	3-27 to 3-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.2 Impact Assessment	v. An assessment of incremental costs imposed by the needs from the Project directly or indirectly on public infrastructure, services, including those caused by Project-induced demographic changes, and	8	3	3.3.2.1	-	3-27 to 3-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.2 Impact Assessment	vi. A discussion of community access to Project infrastructure upon closure, including proposed road options.	8	3	3.3.2.1	-	3-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.3 Topics for Discussion	i. A discussion of the potential to bring in freight for communities by return shipping, and likelihood to share shipping costs with local communities,	8	3	3.3.2.1	-	3-30
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.3 Topics for Discussion	ii. A description of the extent and current capacity of the local transportation systems and associated infrastructure,	8	3	3.1.2.6	-	3-11 to 3-13
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.3 Topics for Discussion	iii. An assessment of public health and environmental health needs and implications to the Proponent's community initiatives, and	8 10	3 26	3.3.2.1 All	-	3-27 to 3-31 All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.10.3 Topics for Discussion	iv. 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.	8	3	3.3.2.1	-	3-27 to 3-31
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.11 Human Health and Safety	-	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.11.1 Baseline Information	i. A description of human exposure to current environmental contaminants in the RSA, and	8	5 6	5.1, Appendix V8-5A 6.1	-	5-1 to 5-12, Appendix V8-5A, 6-1 to 6-13
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.11.1 Baseline Information	ii. A discussion relating to the local health statistics when compared with other parts of Nunavut and Canada as appropriate.	8	3	3.1.2.7	-	3-14 to 3-21
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.11.2 Impact Assessment	i. A discussion of the standards, guidelines and regulations that the Project will incorporate during construction and operations, at various Project sites to minimize the impacts and protect workers' health,	2 8 10	2 6 25	2.1.5, 2.1.7 6.4.1.9, 6.4.2.9, 6.4.3.9 3.7	-	2-3 to 2-5 6-70 to 6-80, 6-123 to 6-134, 6-151 25-8
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.11.2 Impact Assessment	ii. An assessment of the health, safety and security of workers at the job sites taking into account different Project phases and locations (e.g., explosive manufacturing plant, drilling and blasting operation, and heavy equipment operations),	8	6	6.4.3.6, 6.4.3.7	-	6-145 to 6-146, 6-146
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.11.2 Impact Assessment	iii. Potential impacts on human health from air contamination, fugitive dusts resulting from air and ground traffic, potential impacts to potable water quality, and exposure to escalated noise and extreme weather conditions,	8	6	6.4.2, 6.4.3	-	6-89 to 6-144, 6-144 to 6-156
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.11.2 Impact Assessment	iv. Potential sources and characteristics of any conventional risks to workers or the public during all phases of the Project,	8	6	6.4.4	-	6-156 to 6-157
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.11.2 Impact Assessment	v. Potential effects on physical health such as mortality, morbidity, injuries, accidents, effects on sensitive sub-populations (i.e. asthma sufferers), physical hazards associated with construction, operation and closure phases, and	8	6	6.4.2.10	only regarding effects of air pollution on sensitive sub-populations (e.g., asthma sufferers)	6-134 to 6-142

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.11.2 Impact Assessment	vi. Potential impacts of workplace discipline and cultural conflicts among Nunavummiut, Northwest Territories, and Southern workers, including those issues which may be related to or exacerbated by language barriers between employees.	10	28	3.1.4, 3.1.5, 7.1.5.3	Cultural and other conflicts among workers to be avoided with cross cultural and gender-sensitivity orientation program (Section 7.1.5.3), the treatment of language by the Project (Section 3.1.5), a strategy to prevent discrimination (Section 3.1.4), and the employment of an Inuit Employment and Training Coordinator (Section 7.3.2.4).	1-4, 1-4 to 1-5, 1-11.
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.2 SOCIO-ECONOMIC ENVIRONMENT AND IMPACT ASSESSMENT	8.2.11.3 Topics for Discussion	i. A description of the existing infrastructure and health services available within the RSA and the potential impact on the quality of health services, including the resources and capacity to monitor and respond to increased health hazards.	8	3, 6	3.1, 3.3.2.3, 6.4.2.8	-	3-1 to 3-21, 3-32 to3-36, 6-89 to 6-144
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		Key components of the Human Health Risk Assessment process include the identification of potential Project-human interaction pathways, and hazardous substance constituents of potential concern (COPC), human receptors and assessment criteria. As such, the Human Health Risk Assessment is to include:	8	6	6.4.2	-	6-89 to 6-144
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		i. Predicted sources, quantities and points of release from Project emissions and effluents containing hazardous substances,	8	6	6.4.2.7.1	-	6-98 to 6-100
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		ii. A selection process for COPCs,	8	6	6.4.2.9	-	6-123 to 6-134
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		iii. Identification of all pathways to human receptors including bioaccumulation in country foods,	8	6	6.4.2.7.2, 6.4.2.7.3, 6.4.2.7.4, 6.4.2.7.5	-	6-100 to 6-101, 6-101 to 6-107, 6-107 to 6-114, 6-114
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		iv. Identification and characterization of human receptors (workers and the public). Include maps to delineate their locations and the distances of communities, residences, temporary/seasonal residences, etc. to project sites and related infrastructure,	8	6	6.4.2.7.3	-	6-101 to 6-107
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		v. The method used to convert hazardous substance exposure and human receptors from various pathways to calculate exposure or dose (e.g. conversion factors), and	8	6	6.4.2.10.3	-	6-138 to 6-139
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		vi. Criteria used to determine significance of impact, specifically, calculation of hazard quotients, which translates into the ratio between the predicted maximum exposure concentration for each contaminant of concern in each relevant media (i.e. air, water, soil, sediment) and the toxicity threshold for the most sensitive biological receptor in the respective medium for which toxicity information is available.	8	6	6.4.2.9.1, 6.4.2.9.2, 6.4.2.9.4, 6.4.2.10.1, 6.4.2.10.4	-	6-123 to 6-124, 6-124 to 6-127, 6-128 to 6-134, 6-134 to 6-137, 6-139 to 6-142
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		Key components of the Environmental Risk Assessment process include the identification of potential project and terrestrial and aquatic receptor interaction pathways, hazardous substance COPCs, terrestrial and aquatic ecological receptors and assessment criteria. As such, the Environmental Risk Assessment is to include:	8	6	6.4.1	-	6-18 to 6-89
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		i. Predicted sources, quantities and points of release from the Project emissions and effluents containing hazardous substances,	8	6	6.4.1.7.1	-	6-37 to 6-38
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		ii. The selection process for COPCs,	8	6	6.4.1.9	-	6-70 to 6-80
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		iii. Identification of disease vectors,	8	6	6.4.1.6	-	6-35 to 6-36
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		iv. Identification of pathways to terrestrial and aquatic ecological receptors (VECs),	8	6	6.4.1.7.2, 6.4.1.7.3, 6.4.1.7.4, 6.4.1.7.5	-	6-38 to 6-40, 6-40 to 6-47, 6-47 to 6-58, 6-58
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		v. Identification and characterization of terrestrial and aquatic ecological receptors,	8	6	6.4.1.1, 6.4.1.2, 6.4.1.7.3	-	6-19 to 6-20, 6-20 to 6-22, 6-40 to 6-47
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		vi. The method used to convert hazardous substance exposure and intake by the various ecological receptors from the various pathways into an exposure or dose (e.g. conversion factors),	8	6	6.4.1.9.1, 6.4.1.10, 6.4.1.11	-	6-70 to 6-78, 6-80-6-88, 6-88
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		vii. Exposure conditions, identifying routes of exposure (air, water, soil, food), public and occupational exposure, address high risk populations,	8	6	6.4.1.7.2, 6.4.2.7.2, 6.4.2.10	-	6-38 to 6-40, 6-100 to 6- 101, 6-134 to 6-142

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		viii. Noise effects (i.e. potential effects on human health resulting from atmospheric noise levels and noise interactions with species that are traditional food sources), and	8	6	6.4.3	-	6-144 to 6-156
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.3 HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENT		ix. Criteria used to determine significance of impact, specifically, calculation of hazard quotients, which translates into the ratio between the predicted maximum exposure concentration for each contaminant of concern in each relevant media (i.e. air, water, soil, sediment) and the toxicity threshold for the most sensitive biological receptor in the respective medium for which toxicity information is available.	8	6	6.4.1.9, 6.4.1.10, 6.4.1.11	-	6-70 to 6-80, 6-80-6-88, 6-88
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.4 ACCIDENT AND MALFUNCTIONS ASSESSMENT		An assessment must be provided for malfunction and accident scenarios that have a reasonable probability of occurring. The assessment is to include:	-	-	-	-	-
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.4 ACCIDENT AND MALFUNCTIONS ASSESSMENT		i. A description of the source, quantity, mechanism, rate, form and characteristics of contaminants and other materials both physical and chemical, likely to be released to the surrounding environment during the postulated malfunctions and accidents, and	9	3	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.4 ACCIDENT AND MALFUNCTIONS ASSESSMENT		ii. A description of any contingency, clean-up or restoration work in the surrounding environment that would be required during, or immediately following, the postulated malfunction and accident scenarios.	9	3	All	-	All
8.0 PROJECT ENVIRONMENT AND IMPACT ASSESSMENT	8.4 ACCIDENT AND MALFUNCTIONS ASSESSMENT		The assessment for conventional malfunctions and accidents should include fire and explosion incidents and demonstrate that the conventional malfunctions and accidents are unlikely to cause long-term or residual effects both to persons and the environment, taking into account the proposed mitigation measures and including preventive measures and emergency response capability.	9	3	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.1 ENVIRONMENTAL MANAGEMENT PLAN		An Environmental Management Plan (EMP) provides a systematic approach to consistently manage all environmental affairs for the Proponent, addressing concerns through the allocation of resources, assignment of responsibility and ongoing evaluation of practices, with an aim to improving its environmental performance by continual improvement of the management system. The Proponent shall present its environmental policy, its EMP and associated environmental management system through which it will deliver this plan.	10	1	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.1 ENVIRONMENTAL MANAGEMENT PLAN		The EMP shall provide a perspective on how potentially adverse environmental effects will be managed throughout the life of the Project.	10	1	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.1 ENVIRONMENTAL MANAGEMENT PLAN		The Proponent shall discuss the flexibility of the proposed EMP to respond to changes in the mining development plan, the regulatory regime, the biophysical and socio-economic environments, technology, research results, and the understanding of TK.	10	1	2, 7, 14	-	1-12, 1-9, to 1-18 to 1--19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.1 ENVIRONMENTAL MANAGEMENT PLAN		The Proponent shall discuss how the results from the EMP will be used in applying adaptive environmental management throughout all phases of the Project, and identify threshold/criteria and indicators to trigger management actions in each sub plan.	10	1	2, 7, 14	-	1-12, 1-9, to 1-18 to 1--19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.1 ENVIRONMENTAL MANAGEMENT PLAN		The EMP shall be comprised of individual monitoring and mitigation plans, specific to various aspects, components, activities and phases of the Project. Although the information requirements of the following sections are intended to be as comprehensive as possible, it is recognized that various items may be dependent on the Proponent's development plans for the Project, which will continue to be refined throughout the NIRB's review process.	10	1	13	-	1-13 to 1-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.1 ENVIRONMENTAL MANAGEMENT PLAN		While some information required under these plans might not be available for the Proponent's Draft EIS submission, the Proponent shall include a scheduled timeline relating to stages of the NIRB's review process or the later licensing/regulatory processes when this information will become available (i.e. Technical Meeting, Final EIS, Final Hearing, and Water Licensing).	Noted			-	
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.1 ENVIRONMENTAL MANAGEMENT PLAN		The NIRB recognizes that flexibility in the arrangement of the information requested in the following sections may be required and the Proponent may use its judgement in consolidating or arranging the information in the most effective fashion.	-	-	-	-	-
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.1 ENVIRONMENTAL MANAGEMENT PLAN		In its individual monitoring and mitigation plans, the Proponent shall also assess the likely effectiveness of mitigation measures and associated follow-up mechanisms for adaptive management.	10	1	14	-	1-15 to 1-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.1 ENVIRONMENTAL MANAGEMENT PLAN		The Proponent shall provide a risk assessment of those economic (e.g. the global economy and international markets), or other conditions (e.g. ownership transfer) that might also impair the implementation or effectiveness of proposed mitigation measures or management.	10	1	2, 7, 14	To be provided with the FEIS	1-12, 1-9, to 1-18 to 1--19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.2 ENVIRONMENTAL PROTECTION PLAN		The Proponent shall, based on its impact predictions for identified VECs and VSECs, prepare an Environmental Protection Plan (EPP) in accordance with its EMP prior to commencement of construction for all phases of the Project (site preparation, construction, operation, maintenance, any potential modifications, temporary closure, final closure (decommission & reclamation) and post-closure).	10	1, 2, 7	13, 1, 7.1	Table 13-1	1-15, 2-1, 7-41
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.2 ENVIRONMENTAL PROTECTION PLAN		The EPP shall be integrated into procedure documents for all phases of the Project which target the site management staff, the Proponent's occupational health, safety and environmental compliance staff, as well as government departments and agencies tasked with environmental and regulatory compliance monitoring/surveillance.	10	1	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.2 ENVIRONMENTAL PROTECTION PLAN		A Table of Contents and an annotated outline for the EPP is to be presented in the EIS which shall address the major Project activities, permit requirements, mitigation measures and contingency planning in combination with other management plans.	10	2	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		In accordance with the EMP, the Proponent shall present individual monitoring and mitigation plans, specific to various aspects of the Project and the environment, to be incorporated into all applicable phases of the Project.	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		In these plans, the Proponent is required to outline how results from monitoring will be used to refine or modify the design and implementation of mitigation measures and management plans.	10	All	All	-	All

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		The plans are meant to ensure that the Project is conducted as proposed, predicted adverse environmental effects are promptly mitigated, and relevant laws and regulations are met, and thus ensure the proper operation of works, equipment, and facilities connected to the Project. Plans should outline procedures for the re-assessment, improvement, or reorientation of the plan should it be determined at any point in the Project’s development that such plan no longer meets the initial purpose or objective.	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		In its monitoring and mitigation plans, the Proponent should specify proposed criteria or thresholds to trigger the mitigation measures based on its monitoring results, including the position of the person for the implementation of these mitigation measures, the system of accountability and the phase and component of the Project to which the mitigation measure would be applied.	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		Each of the monitoring and mitigation plans shall include:	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		i. Objectives of the monitoring program, applicable laws, regulations and/or Acts,	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		ii. The VECs and VSECs to be monitored, with associated parameters and indicators, and selection criteria/thresholds to be compliant with,	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		iii. A description of the frequency, duration, and geographic extent of monitoring with justification for each, and identification of the personnel who will conduct the monitoring, collect, analyze and interpret data,	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		iv. A description of measures taken to protect the monitoring infrastructure from climate change and potential major climate events (e.g. extreme flows),	9	2	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		v. Proposed actions in the event that observed results (impacts) differ from those predicted, including a discussion of actions to be taken for observed non-compliance with the law or regulations, performance targets or with the obligations imposed on contractors by the environmental provisions of their contracts,	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		vi. Proposed reporting scheme for monitoring results, including format, reporting intervals, and responsible territorial and federal authorities,	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		vii. An evaluation of the efficiency of mitigation measures, and the compliance with Project authorizations,	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		viii. Plans for integration of monitoring results with other aspects of the Project including, adjustments for operating procedures and refinement of mitigation measures,	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		ix. Procedures/mechanism to assess the effectiveness of monitoring programs, mitigation measures, and adaptive programs for areas disturbed by the Project,	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		x. A discussion of the relationship between monitoring plans and the EMP, and	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		xi. Quality assurance and quality control measures to be applied to monitoring programs.	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		As described in Section 7.3, the Proponent should consider the design of all biophysical environmental monitoring programs to ensure that the baseline data required is useful in understanding the relationship between the natural ecological conditions and the potential Project impacts on these conditions. This would improve interpretation of monitoring data in order to differentiate between natural variability and project-specific impacts.	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.3 MONITORING AND MITIGATION PLANS		All monitoring plans should be designed so that results from these programs can be coordinated with ongoing regional initiatives or programs with relevant government organizations, or regional authorities.	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS		The Proponent shall present environmental monitoring and management plans developed to eliminate or mitigate potential negative impacts of the Project on the biophysical environment as identified in Section 8.1.	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS		The Proponent shall also identify any residual effects after appropriate mitigation measures are implemented.	1 4 5 6 7 8	6, 7, 8 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	All X.5, X.6, X.7, X.8 X.5, X.6, X.7, X.8 X.5, X.6, X.7, X.8 X.5, X.6, X.7, X.8 X.5, X.6, X.7, X.8	-	All 1-15 to 1-30, 2-11 to 2-36 4-26 to 4-69, 5-83 to 5-152, 6-35 to 6-81, 7-19 to 7-64, 8-30 to 8-92, 9-30 to 9-60, 10-21 to 10-54 1-41 to 1-53, 4-35 to 4-62, 5-21 to 5-44, 6-53 to 6-71, 7-35 to 7-49 2-16 to 2-43, 3-12 to 3-34, 4-36 to 4-46, 5-19 to 5-30, 6-18 to 6-49, 7-15 to 7-40 1-15 to 1-34, 3-37 to 3-113, 4-32 to 4-79, 5-19 to 5-43N/A
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS		The plans shall be developed to reflect the complete life span of the Project, and contain appropriate monitoring and evaluation techniques (e.g. indicators) that will allow regulators to intervene in a timely and constructive manner.	10	All	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS		The plans shall target identified VECs and are to include, but should not be limited to, the following list:	10	All	All	-	All

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	The Proponent shall provide an assessment of the potential risks from natural hazards, in both marine and terrestrial environments. This plan shall encompass the whole life of the mine and will provide mitigative measures which address the potential ecological and human health risks. The Proponent shall also identify and describe the likelihood of possible malfunctions and accidents occurring independently of, or associated with natural hazards.	10	3	4	-	3-13 to 3-14
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	The Proponent shall develop an Emergency Response Plan to be supported by appropriate manual emergency response capabilities and that can be applied to deal with the range of emergency situations considered reasonable under circumstances of the Project.	10	3	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	The following issues shall be included in the Risk Management and Emergency Response Plan:	-	-	-	-	-
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	i. An assessment of potential natural hazards in the LSA and shipping corridors, including frequency, magnitude and possibilities of occurrence. Natural hazards to be considered should include extreme weather events, natural seismic events, landslides, and flooding,	9 10	2, 3 3	2.2, 3.2 4.2	Table 2.2-1	2-1 to 2-7, 3-2 to 3-6 3-14
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	ii. An analysis of the potential for malfunctions and accidents associated with Project facilities and activities, including land or ice based, air or marine transportation, occurring independent of, or associated with natural hazards,	9 10	All 3	All 4.3	-	All 3-1 4
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	iii. Annual aviation audits for the aircraft types, companies and infrastructure associated with all Project related air transportation and documentation of the minimum flying height and seasonal flight restriction for the Project area,	10	3	5.4	-	3-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	iv. An assessment of fire risk to evaluate potential fire hazards, as well as the fire protection systems and features (including both physical attributes and program elements) used to mitigate the effects of fire,	10	3	5.5.2	-	3-18 to 3-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	v. Alerting, notification and reporting procedures, and associated responsible organizations and personnel,	10	3	2, 3, 4, 5	-	3-6 to 3-22
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	vi. Contingency responding procedures corresponding to each risk, and associated security systems and prevention measures, such as monitoring systems, hazard and leak detection systems, fire-control systems, and standby emergency systems,	10	3	4	-	3-13 to 3-14
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	vii. A discussion of options for the medical transport of injured staff or persons both within and beyond the Project area,	10	3	5.5.1	-	3-16 to 3-17
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	viii. A discussion of the constraints resulting from logistics and time frames for prompt reaction, with consideration for the potential distance to an accident or emergency site, and possible weather conditions which might cause considerable delays or obstacles,	10	3	5.5.1	-	3-16 to 3-17
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	ix. A description of how relevant government agencies, Inuit organizations and local communities will be involved in the development and application of the plans if applicable, and	10	3	1.4	-	3-2
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.1 Risk Management and Emergency Response Plan	x. Any other contemplated loss prevention practices, including insurance.	10	15	12	-	15-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.2 Fuel Management Plan	The Proponent shall develop Fuel Management Plans based on its environmental policy, to promote environmental awareness and safety. These plans are to be linked to Spill Contingency Plans, and must include the following, at a minimum:	-	-	-	-	-
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.2 Fuel Management Plan	i. Requirements of federal and territorial regulations,	10	4	4	-	4-2 to 4-3
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.2 Fuel Management Plan	ii. Conceptual design drawings for fuel storage areas and procedures for bulk fuel transfer,	10	4	6	This will be further addressed in detailed design, FEIS	4-8 to 4-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.2 Fuel Management Plan	iii. Substances covered by the plan (e.g. oil, fuel, hazardous materials, chemicals and other deleterious substances),	10	4	1	-	4-1
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.2 Fuel Management Plan	iv. Training for emergency response staff including distributing Material Safety Data Sheet (MSDS) to designated emergency response and health centre staff,	10	4, 6	7.3, 7	-	4-1 6 to 4-18, 6-17
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.2 Fuel Management Plan	v. Alerting, notification and reporting procedures, and	10	4, 5	5, 9, 5	-	4-3, 4-20, 5-7 to 5-14
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.2 Fuel Management Plan	vi. Duties and responsibilities of key organizations and personnel.	10	4, 5	5, 9, 5	-	4-3, 4-20, 5-7 to 5-14
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3 Spill Contingency Plans	The Proponent shall develop Spill Contingency Plans based on its Environmental Policy and which promote environmental awareness and safety, and further, which facilitate efficient clean- up for potential spill incidents related to the Project. These plans shall include Land, Water and Ice Based Spill Contingency Plans, Oil Handling Facility Contingency Plans and Shipboard Oil Pollution Emergency Plans.	10	5	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3 Spill Contingency Plans	In each plan, the Proponent shall address potential constraints to timely actions and immediate clean-up of spills which result from logistical and/or weather conditions.	10	5	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3 Spill Contingency Plans	The Proponent shall include the following elements in its development of all spill contingency plans:	-	-	-	-	-
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.1 Land, Water and Ice Based Spill Contingency Plans	i. Requirements of federal and territorial regulations,	10	5	1.6	-	5-3 to 5-4
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.1 Land, Water and Ice Based Spill Contingency Plans	ii. Substances to which the plan is applicable (e.g. oil, fuel, hazardous materials, chemicals and other deleterious substances) and potential spill scenarios (on land, water and ice, if applicable),	10	5	1.6	-	5-3 to 5-4

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.1 Land, Water and Ice Based Spill Contingency Plans	iii. Training for emergency response staff, including distributing Material Safety Data Sheets (MSDS) to designated emergency response and health centre staff,	10	5	6	-	5-14 to 5-15
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.1 Land, Water and Ice Based Spill Contingency Plans	iv. Alerting, notification and reporting procedures,	10	5	5.2, 9.1	-	5-9, 5-21
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.1 Land, Water and Ice Based Spill Contingency Plans	v. Duties and responsibilities of key spill response organizations and personnel,	10	5	5	-	5-7 to 5-13
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.1 Land, Water and Ice Based Spill Contingency Plans	vi. Clean-up strategies, technologies and corresponding inventory of spill response equipment and kits based on different substances of spills and environment conditions where spills might occur, and	10	5	8	-	5-17 to 5-21
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.1 Land, Water and Ice Based Spill Contingency Plans	vii. Spill site restoration and remediation (including treatment of contaminated soils).	10	5	7	-	5-15 to 15-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.2 Oil Handling Facility (OHF) Contingency Plan	i. Regulatory requirements of the Canada Shipping Act,	10	6	1.1	-	6-1
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.2 Oil Handling Facility (OHF) Contingency Plan	ii. Established Oil Pollution Prevention/Emergency Plan for operation of OHF,	10	6	1.2	-	6-1
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.2 Oil Handling Facility (OHF) Contingency Plan	iii. Responsible personnel required equipment and training, and	10	6	6	-	6-12to 6-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.2 Oil Handling Facility (OHF) Contingency Plan	iv. Response scenarios and procedures.	10	6	8	-	6-23
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.3 Shipboard Oil Pollution Emergency Plans (SOPEPs)	i. Requirements of national laws and regulations, as well as international regulations and standards for proposed shipping operation of the Project,	10	6	2.1	-	6-2
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.3 Shipboard Oil Pollution Emergency Plans (SOPEPs)	ii. Marine transportation to be used for the Project including fuel tankers, container ships, barges, tugs, and any other marine vessels,	10	6	3.1, 3.2, 4	-	6-4, 6-8 to 6-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.3 Shipboard Oil Pollution Emergency Plans (SOPEPs)	iii. A discussion regarding the relationship between SOPEPs and the Canadian Coast Guard's Regional Response Plan, including identification of potential for the Regional Response Plan to be adapted to the Project,	10	6	7.2	-	6-19 to 6-20
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.3 Shipboard Oil Pollution Emergency Plans (SOPEPs)	iv. Procedures for accident/incident reporting and principle emergency response, and	10	6	7.3	-	6-20 to 6-21
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.3.3 Shipboard Oil Pollution Emergency Plans (SOPEPs)	v. Parties (e.g. the Proponent, marine vessel operators and possible third parties) who carry out emergency actions.	10	6	7.2, 7.3, 7.4	-	6-20 to 6-21
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	The Proponent shall develop a Site Water Management Plan for the Project. This plan shall provide a consolidated source of information on the strategies to be applied to intercept, collect, contain, conserve, monitor and prevent the release of potentially contaminated waters. This plan shall also include a discussion of all major sources of water from the Project including process effluent, open pit water, underground mine water, site and stockpile drainage/runoff, and sewage/grey waste water and is to be associated with the baseline data and impact assessment required by Subsection 8.1.6.1. The plan shall at a minimum, consider the following:	10	7	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	i. Surface runoff, snowmelt, and rainwater that might come in contact with contaminated areas at the mine sites and along roads,	10	7	3.4	-	7-9 to 7-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	ii. Runoff from overburden stockpiles, waste rock stockpile areas including waste rock identified with potential ARD and ML, ore stockpiles and quarry sites,	10	7	3.6	-	7-16 to 7-26
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	iii. Runoff from the lined fuel tank farms, fuel transfer stations, and landfill facilities,	10	7	3.4.3	-	7-1 6to 7-26
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	iv. The prediction of the artesian inflow into the tailing management facilities during operation with support from numerical modeling if permafrost beneath the tailing management facilities is predicted to thaw during the life cycle of the tailing management facilities. The potential preferential flow along the fault cut through the pits should be considered in the inflow prediction. Measures for controlling the groundwater inflow/seepage, where necessary, should be discussed and a groundwater monitoring plan should be developed,	10	7	3.6.7	-	7-24 to 7-25
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	v. A description of the water management strategies, including methods for any water conservation and recycling methods to maximize water reuse and minimize use of natural waters,	10	7	6.2.1	-	7-37
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	vi. A description of the water management for the open pits and underground mines, and the tailings management facilities with consideration for the capacity of the open pits and underground mines, and the tailings management facilities to cope with storms, floods and other intermittent natural events with consideration of a conservative precipitation event (i.e., the PMP: Probable Maximum Precipitation). Design of the pumping capacity of the plant and treatment facility should take the potential maximum inflow and the PMP event into consideration,	10	7	3.6, 6.4	-	7-17 to 7-26, 7-38 to 7-39
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	vii. Contingency plans should the mine water volumes be significantly larger or less than estimated, specifically to address plans for mine operations and safety during times of low water availability,	10	7	3.6.5, 3.6.7	-	7-26

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	viii. Management measures to reduce potential impacts to the receiving environment, including collection and monitoring of drainage water, installation of settling ponds, sumps or silt curtains, and geochemical characterization of construction materials,	10	7	6.3 to 6.8	-	7-134 to 7-38
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	ix. Proposed management of contact and noncontact water, and how the design of these components incorporates the consideration of climate change, especially when water diversions are proposed (i.e. increased or decreased flows),	10	7	6.1	-	7-39
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	x. Waste water treatment technologies and facilities, and estimated volumes and treatment targets of the effluent, as well as the applicable discharge standards including standards under the Fisheries Act,	10	7	3	Table 3.3	7-5
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	xi. Waste water management in the construction stage at construction camps, including treatment/disposal methods, associated facilities,	10	7	3.3	-	7-5 to 7-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	xii. Conceptual operation and maintenance plans, including options for sewage sludge, and	10	7	3.3	-	7-5 to 7-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.4 Site Water Management Plan	xiii. Contingency measures for sewage plant malfunction and/or disturbances, associated spill response measures, as well as treatment technologies and facilities.	10	7	3.3	-	7-9 to 7-10
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.5 Ore Storage Management Plan	The Proponent shall present an Ore Storage Management Plan which encompasses all ore generated or produced by the Project and includes at a minimum:	10	8	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.5 Ore Storage Management Plan	i. A discussion of the predicted ore stockpile volumes/tonnage, physiochemical characteristics, stockpile methods and procedures including dust control, runoff management, progressive reclamation plans, and other details as deemed relevant,	10	8, 29	3.1, 3.2, 3.3, 3.4, 6.2, 6.1, 3	-	8-1 to 8-9, 29-16 to 29-17
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.5 Ore Storage Management Plan	ii. A description of analyses implemented in the development of the proposed pile design and runoff management plans, include description and analysis of the water balance of the stockpiled ore material, the physical and chemical characteristics of seepage and runoff from the stockpiled ore material, as well as the thermal condition of the pile and surrounding ground, and consideration in the design of control measures to ensure seepage and runoff do not impact the surrounding environment,	10	8	3.1, 3.2, 3.3, 3.4, 6.1	-	8-2, 8-7, 8-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.5 Ore Storage Management Plan	iii. A discussion on the means to minimize loss of ore material to the environment by wind and other means,	10	8	6.2	-	8-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.5 Ore Storage Management Plan	iv. A discussion of proposed plans for accommodating the projected volumes of materials at the ore stockpile facilities, with a discussion of measures for contingency measures to address the situation in which the designed facilities are not adequate to accommodate ore actually generated,	10	8	3.3, 3.6	-	8-5, 8.8 to 8-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.5 Ore Storage Management Plan	v. Details regarding the process for selecting the preferred options for management of ore stockpile, including a discussion of alternative options (methodologies as well as locations) considered, and the rationale by which the proposed scheme was selected, and	2 10	4 8	4.2.5.2 3.6	-	4-8 to 4-9 8-7
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.5 Ore Storage Management Plan	vi. A conceptual plan to monitor and audit ore generated.	10	8	7	-	8-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.6 Mine Waste Rock and Tailings Management Plan	The Proponent shall present a Mine Waste Management Plan which addresses all waste rock generated or produced by the Project through all Project phases as well as all tailings generated by the Project over the mine life. It may assist the Proponent to consult with the Prediction Manual for Drainage Chemistry from Suphidic Geologic Materials (Price, 2009) and Cold Regions Cover System Design Technical Guidance Document (O’Kane Consultants, 2012) in the identification of the waste rock characteristics as well as resulting plan. The Plan shall include, at a minimum:	10	9	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.6 Mine Waste Rock and Tailings Management Plan	i. A discussion of the predicted volumes/tonnage, physicochemical characteristics, segregation criteria, stockpile methods and procedures including dust control, runoff and seepage management, progressive reclamation plans, and other details as deemed relevant for both waste rock and tailings,	10	9	3.1, 6.1	-	9-2 to 9-16, 9-15
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.6 Mine Waste Rock and Tailings Management Plan	ii. A description of analyses implemented in the development of the proposed pile design and runoff and seepage management plans, include description and analysis of the water balance of the waste rock pile, the physical and chemical characteristics of seepage and runoff from waste rock piles, as well as the thermal condition of the pile and surrounding ground, and consideration in the design of control measures to ensure seepage and runoff do not impact the surrounding environment,	10	9	3.1, 6.1	-	9-2 to 9-5, 9-18
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.6 Mine Waste Rock and Tailings Management Plan	iii. A description of analyses implemented in the development of the proposed pond design and runoff and seepage management plans, include description and analysis of the water balance, the physical and chemical characteristics of seepage and runoff from surrounding area, as well as the thermal condition of the pond and surrounding ground, and consideration in the design of control measures to ensure seepage and runoff do not impact the surrounding environment,	10	9	3.2, 6.1	-	9-6, 9-13 to 9-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.6 Mine Waste Rock and Tailings Management Plan	iv. A description of the potential for rock heave phenomena and any resulting implications to ground stability,	10	9	3.1.6, 3.2.7	-	9-5, 9-8, 9-15
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.6 Mine Waste Rock and Tailings Management Plan	v. A discussion of proposed plans for accommodating the projected volumes of materials at waste rock and tailings facilities, with a discussion of measures for contingency situations in which the designed facilities may not be adequate to accommodate the volumes of waste rock and tailings actually generated,	10	9	3.1.4, 3.1.5, 3.2.3	-	9-3, 9-7
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.6 Mine Waste Rock and Tailings Management Plan	vi. Details regarding the process for selecting the preferred options for the management of waste rock and tailings, including a discussion of alternative options (methodologies as well as locations) considered, and the rationale by which the proposed schemes were selected,	2 10	4 9	4.2.5.2, 4.2.7 3.1, 3.2	-	4-9 to 4-12 9-6 to 9-9, 9-14 to 9-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.6 Mine Waste Rock and Tailings Management Plan	vii. Detailed information on the waterways impacted by the proposed deposition of tailings to determine whether or not the Navigable Waters Protection Act (or subsequent replacement legislation) applies, as well as details of any anticipated impacts to navigation on any waterways listed as “navigable”, and	10	9	4, 6.4	-	9-9, 9-16

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.6 Mine Waste Rock and Tailings Management Plan	vii. Detailed information on the waterways impacted by the proposed deposition of tailings to determine whether or not the Navigable Waters Protection Act (or subsequent replacement legislation) applies, as well as details of any anticipated impacts to navigation on any waterways listed as “navigable”, and	10	9	6.4	-	9-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.6 Mine Waste Rock and Tailings Management Plan	viii. Conceptual plans to monitor and audit mine waste rock and tailing ponds.	10	9	7	-	9-16 to 9-17
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.7 Landfill and Waste Management Plan	The Proponent shall develop a Landfill and Waste Management Plan which discusses how non-combustible, non-hazardous industrial wastes will be handled in a safe and environmentally sound manner, and includes the sorting, possible transport, and ultimate disposal of Project wastes. The plan should emphasize how the Proponent plans to minimize the environmental footprint of the Project, and shall include:	10	10	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.7 Landfill and Waste Management Plan	i. Landfill management plans for the mining operations phase,	10	10	2, 3	-	10-1 to 10-4
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.7 Landfill and Waste Management Plan	ii. A discussion of measures taken during periods of rainwater, snow and spring freshet,	10	10	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.7 Landfill and Waste Management Plan	iii. Landfill closure and reclamation plans,	10	10 29	12 4.10	-	10-14 29-25
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.7 Landfill and Waste Management Plan	iv. A description of plans to reduce/reuse/recycle Project wastes, and	10	10	6, 7	-	10-6 to 10-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.7 Landfill and Waste Management Plan	v. A discussion of any planned use of municipal waste management facilities or services.	10	10	4, 7	-	10-3, 10-7 to 10-8
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	The Proponent shall develop a Hazardous Materials Management Plan. The hazardous materials discussed are to include hydrocarbon contaminated soils, snow and water, fuel, lubricants, process reagents, chemical reagents used for site laboratory, solvents and paints, medical wastes, batteries, and other office-generated hazardous waste. This plan shall be developed in connection with the Emergency Response and Contingency Plan, and is to include the following:	10	12	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	i. Characterization of potential environmental hazards posed by these materials, and the management of these through the environmental management system,	10	12	6	-	12-6 to 12-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	ii. Purchasing controls, shipment tracking procedures,	10	12	10	-	12-26
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	iii. Fuel storage monitoring program,	10	12	9	-	12-26
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	iv. Safe handling and storage procedures,	10	12	7.3	-	12-12 to 12-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	v. A discussion of the allocation of responsibilities for managing shipments, storage, handling and use of potentially hazardous materials,	10	12	7.3	-	12-12 to 12-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	vi. Contingency and emergency response plans associated with hazardous materials,	10	12	6.2, 7.4	-	12-10, 12-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	vii. Type and delivery of training for management, workers, and contractors whose responsibilities include handling potentially hazardous materials as well as those that may be required to assist and/or treat any of the above if there is an emergency/accident (i.e. local fire department, health centre, Royal Canadian Mounted Police detachment, etc.),	10	12	6.3	-	12-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	viii. Procedures for the maintenance and review of records of hazardous material consumption and incidents in order to anticipate and avoid impacts on human health and the environment,	10	12	11	-	12-27
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	ix. Plans for unused chemicals and/or reagents upon the completion of Project activities,	10	12	7.3.6	-	12-18 to 12-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	x. Procedures to track and manage wastes generated through use of these products, including shipments of potentially hazardous waste to licensed disposal facilities, and	10	12	10.2	-	12-26
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.8 Hazardous Materials Management Plan	xi. A discussion on the waste management at the dock site including shipping waste generated on board and hazardous waste.	10	12	7.2	-	12-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.9 Incineration Management Plan	The Proponent shall develop an Incineration Management Plan which is consistent with the guidance provided in Environment Canada’s (EC) Technical Document for Batch Waste Incineration (EC, 2010). The Plan shall include but not be limited to the following:	10	11	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.9 Incineration Management Plan	i. Standards/requirements for emissions from incinerator operation,	10	11	4	-	11-3
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.9 Incineration Management Plan	ii. Incineration technologies to be used, facilities and equipment to be used,	10	11	6.1, 6.2, 6.3, 7	-	11-4,11-7 to 11-8
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.9 Incineration Management Plan	iii. Personnel training programs for incinerator management and operation, and	10	11	6.4, 6.5	-	11-5 to 11-6
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.9 Incineration Management Plan	iv. Collection and reporting of operational data and maintenance records.	10	11	9, 10, 11, 12	-	11-9 to 11-10

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	The Proponent shall develop a Roads Management Plan for all access/service roads proposed in the Project areas. The Plan shall address construction, operations, temporary closure and final closure phases of the Project. In association with the Spill Contingency Plan and the Wildlife Mitigation and Monitoring Plan, this plan shall include:	10	14	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	i. Permitting regime and land tenure of all ground transportation as well as designations of accessibility to public,	10	14	5	-	14-14
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	ii. A discussion on how the selected route(s) may correspond to the needs of other developers and of Nunavummiut, paying particular mind to any public consultation undertaken with respect to the proposed routing, specifically as it may relate to traditional land or resource use,	10	14	2	-	14-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	iii. Construction details applicable to Transport Canada's Navigable Waters Protection Program which could include, but not be limited to, any works built or placed in, on, over, under, through or across a navigable waterway (i.e. bridges, booms, dams, and causeways).	10	14	4.1, 4.2	-	14-10 to 14-13
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	iv. Projected traffic volumes, including the types and numbers of vehicles to be used, fluctuations on a seasonal or annual basis, and measures to enforce speed limits,	10	14	1	-	14-1 to 14-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	v. Protocols for accidents, accidents causing injuries, vehicle malfunction and emergency protocols,	10	14	8	-	14-18 to 14-22
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	vi. Mitigation measures and protocols to be implemented during construction and operations to mitigate potential impacts to wildlife, including explicit thresholds for mitigation of potential wildlife interactions, collisions and follow-up procedures,	10	14	9, 10	-	14-23 to 14-24
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	vii. Measures for preventing the permafrost degradation during construction and operation of ground transportation,	10	14	7.3	-	14-18
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	viii. Operational procedures for daily operation and maintenance including dust suppression methods, snow removal, de-icing, snow drift/banks management,	10	14	7.1, 7.2	-	14-16 to 14-18
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	ix. Measures to control surface runoff during spring freshet and flooding during construction and operation phases,	10	14	7.1.3	-	14-18
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	x. Measures to control sedimentation during construction, maintenance and operation,	10	14	4.2.4	-	14-13
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	xi. Safety procedures, emergency reporting and procedures for fuel/chemical spills, and other emergency events	10	14	8	-	14-18 to 14-22
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	xii. Plans for site reclamation, especially temporary construction camp and quarry sites which are used for extracting construction materials, disposal of construction waste materials and options of final closure and reclamation, and	10	14	12	-	14-24
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.10 Roads Management Plan	xiii. A discussion of potential future uses (e.g. potential public use).	10	14	12	-	14-24
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	The Proponent shall present a Shipping Management Plan for all Project-related shipping, in connection with the SOPEPs (Subsection 9.4.2), the Wildlife Mitigation and Monitoring Plan, and other related plans as applicable. This plan should include:	10	15	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	i. Applicable environmental legislation, regulations Acts and guidelines associated with shipping, including:	10	15	5, 7, Appendix A	-	15-8 to 15-12, Appendix A
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	o International legislation, such as: MARPOL Convention, Protocols and Annexes as set out by the International Maritime Organization (IMO, 2008, MARPOL 73/78),	10	15	All, Appendix A (3.2.2)	-	All, Appendix A (3.2.2)
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	o Canadian legislation, such as: Canada Shipping Act, Arctic Waters Pollution Prevention Act (e.g. Zone/Date System, Arctic Ice Regime Shipping System, Ice Navigators if applicable),	10	15	All, Appendix A (2.1.1, 2.1.5)	-	All, Appendix A (2.1.1, 2.1.5)
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	o Construction details applicable to Transport Canada's Navigable Waters Protection Program which could include, but not be limited to, any works built or placed in, on, over, under, through or across a navigable waterway (i.e. bridges, booms, dams, and causeways), and	10	15	1.1, 7.2, Appendix A (2.1.5)	-	15-1 to 15-2, 15-8, Appendix A (2.1.5)
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	o How the Proponent and its shipping contractors/partners intend to either meet or exceed these requirements for both barging and deep sea shipping operations and for all marine shipping alternatives.	10	15	1.2, 7.0	-	15-2, 15-8 to 15-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	ii. A description of basic contingency planning associated with the marine transportation component of the project, particularly in relation to the movement of oil, explosives and other hazardous materials,	10	15	2, 7.4	-	15-4 to 15-5, 15-10
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	iii. Provide a hazard identification analysis of the barge and ship routes and a preliminary risk analysis of the marine routes under consideration, along with intended methods of mitigating marine transportation risks,	10	15	7	-	15-8 to 15-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	iv. A discussion of proposed safety measures,	10	15	7	-	15-8 to 15-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	v. A discussion of the challenges related to cleaning up fuel spills in the Arctic environment due to cold temperatures, presence of ice, darkness and remoteness,	10	5, 6	8.2.3, 3.3.5	-	5-19, 6-6
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	vi. Disposal plans and management for onboard waste including solid waste and sewage/grey water while docked at the dock facility and while in transit. Plans should include discussion on how the Proponent and its shipping contractors/partners intend to either meet or exceed legislation and/or other regulatory requirements,	10	15	1.3, 7.5	-	15-2, 15-10
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	vii. Ballast water management plan for all Project shipping, as applicable, with indication of the proposed ballast water exchange locations in mid-ocean, at the dock facility in Bathurst Inlet, and alternative exchange zones within waters under Canadian jurisdiction. Include associated implications for regulatory compliance (Government of Canada, 2006),	10	15	8, Appendix A - Ballast Water Management, Section 3	Appendix A - Ballast Water Management, Section 3	15-12, Appendix A - Ballast Water Management, Section 3
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	viii. Proposed measures to eliminate or reduce the risk of invasive aquatic and non-aquatic species being introduced into Canadian waters as a result of shipping,	10	15	11	-	15-15

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	ix. A discussion of whether the shipping route or part of the proposed shipping route is a compulsory or non-compulsory pilotage area, and associated implications for regulatory compliance (Government of Canada, 2009) if applicable,	10	15	1.2	-	15-2
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	x. Marine wildlife mitigation and onboard monitoring plans, including:	10	15	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	o Applicable guidelines, monitoring protocols, and reporting/action procedures,	10	15	11.1	-	15-15
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	o Measures to minimize the potential interactions between marine mammals and marine vessels, and	10	15	11.2	-	15-15
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	o A description of how interactions between marine mammals and shipping operations will be dealt with,	10	15	11.3	-	15-15
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	xi. Details regarding the proposed procedures for accident, malfunctions and incident management and reporting, including accidental spills of fuel and chemicals along the shipping routes, and from the accidental grounding/stranding of ships along the shipping routes. This should include a discussion of the preparedness of adequate resources to respond to a large fuel spill from a cargo vessel in transit, with reference to the SOPEPs,	10	15	9	-	15-12 to 15-13
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	xii. Measures to mitigate potential impacts to the safety of persons traveling in boats along Project shipping routes,	10	15	10	-	15-14
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	xiii. Measures to prevent the transportation of illicit substances via the marine shipment of project-related goods and supplies,	10	15	13	-	15-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	xiv. Anticipated use of police services for offloading supplies and materials, including dangerous goods and explosives, and in the engagement of emergency/accident procedures,	10	15	7.1, 7.2, 7.3, 7.4, Appendix A (3.2.2)	-	15-8 to 15-10, Appendix A (3.2.2)
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	xv. Identified third party liabilities, and	10	15	Appendix A (3.2.3)	-	Appendix A (3.2.3)
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.11 Shipping Management Plan	xvi. Measures intended to mitigate potential socio-economic impacts as results of shipping.	10	15	3	-	15-5
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.12 Borrow Pits and Quarry Management Plan	The Proponent shall develop a Borrow Pits and Quarry Management Plan which includes:	10	16	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.12 Borrow Pits and Quarry Management Plan	i. Regulations and guidelines to be complied with,	10	16	4	-	16-10
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.12 Borrow Pits and Quarry Management Plan	ii. A description of how the Proponent will minimize the overall impact on surrounding environments by maximizing the use of existing pits and quarry sites to the extent possible, to minimize the number of opened pits, and minimizing haul distances and surface disturbance,	10	16	6	-	16-10 to 16-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.12 Borrow Pits and Quarry Management Plan	iii. Sediment, dust and erosion prevention and control measures,	10	16	6.3	-	16-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.12 Borrow Pits and Quarry Management Plan	iv. Results of ARD/ML potential testing for quarried materials and pit walls, and associated mitigation measures,	10	16	6.1	Results will be provided in the FEIS	16-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.12 Borrow Pits and Quarry Management Plan	v. Aggregate extraction and quarry methods, with associated mitigation measures for potential impacts on the environment, including archaeological,	10	16	3, 6	-	16-3 to 16-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.12 Borrow Pits and Quarry Management Plan	vi. Proposed methods for handling ice, with plans to manage water released by the thawing of permafrost and ground ice, and	10	16	6.4	-	16-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.12 Borrow Pits and Quarry Management Plan	vii. A progressive reclamation strategy and associated technologies.	10	16	3.6	-	16-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.13 Explosives Management Plan	The Proponent shall develop an Explosives Management Plan which provides information on explosives transport, storage and handling at the Project. This plan must discuss the following:	10	13	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.13 Explosives Management Plan	i. Applicable federal and territorial Regulations and Acts,	10	13	4	-	13-5
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.13 Explosives Management Plan	ii. Methods and procedures for the manufacture, transport, storage, handling, and use of explosives,	10	13	6.1, 6.2, 6.5, 6.6	-	13-6 to 13-7, 13-12 to 13-14
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.13 Explosives Management Plan	iii. Details on the manufacture and storage facilities for Ammonium Nitrate and Fuel Oil (ANFO), including applicable guidelines, monitoring protocols, and reporting/action procedures,	10	13	6.1.1, 6.1.2, 9, 10	-	13-6 to 13-7, 13-16 to 13-17
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.13 Explosives Management Plan	iv. Best practices to minimise usage and loss rate,	10	13	8	-	13-15
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.13 Explosives Management Plan	v. Safe handling and spill containment prevention methods,	10	13	6.7, 6.8	-	13-14
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.13 Explosives Management Plan	vi. An evaluation of worst case scenarios (e.g. accidental explosion),	10	13	10.4	-	13-17
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.13 Explosives Management Plan	vii. Security measures to be implemented,	10	13	6.9	-	13-14
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.13 Explosives Management Plan	viii. Personnel training program, and	10	13	6.4	-	13-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.13 Explosives Management Plan	ix. An internal audit and inspection.	10	13	9.1	-	13-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.14 Air Quality Monitoring and Management Plan	The Proponent shall develop an Air Quality Monitoring and Management Plan in association with the baseline data collected and the impact assessment in Subsection 8.1.1. This plan must include the following key elements:	10	17	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.14 Air Quality Monitoring and Management Plan	i. A description of proposed air quality monitoring and related adaptive management measures for emissions related to the Project as described in Subsection 8.1.1.2, including thresholds for action and mitigation strategies,	10	17	4, 6, 7	-	17-2 to 17-14

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.14 Air Quality Monitoring and Management Plan	ii. An emissions reduction strategy, through which the Proponent would employ appropriate technologies and operating practices, in an effort to minimize emissions of air contaminants from all Project facilities including compliance with approved criteria, and reducing the production of GHGs and other emissions,	10	17	6.1	-	17-4 to 17-6
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.14 Air Quality Monitoring and Management Plan	iii. A dust reduction plan which addresses the use of dust suppression agents, procedures and applicable guidelines for all Project areas where fugitive dust is a concern for air quality and human health,	10	17	6.1	-	17-4 to 17-6
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.14 Air Quality Monitoring and Management Plan	iv. An incineration management plan, as described in Subsection 9.4.9, describing how emissions will be minimized and the Canada-wide Standards for Dioxins and the Furans and the Canada-wide Standards for Mercury emissions met, and	10	17	6.1	-	17-4 to 17-6
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.14 Air Quality Monitoring and Management Plan	v. Procedures for reporting of project emissions and monitoring results.	10	17	11	-	17-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.15 Noise Abatement Plan	The Proponent shall develop a Noise Abatement Plan to provide information on monitoring and mitigating of noise impacts based on its impact assessment in Subsection 8.1.2. This plan must discuss:	10	18	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.15 Noise Abatement Plan	i. Applicable standards, guidelines and regulations that will be incorporated to minimize and mitigate noise effects from the Project,	10	18	2	-	18-1
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.15 Noise Abatement Plan	ii. An environmental noise follow-up monitoring program indicating location, duration, timing and type of noise monitoring to be conducted,	10	18	4	-	18-2
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.15 Noise Abatement Plan	iii. A description of noise control methods based on the climatic conditions and available technologies to be employed should mitigation be required,	10	18	3, 4	-	18-1 to 18-2
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.15 Noise Abatement Plan	iv. Measures and technologies to be adopted in the design and manufacturing of Project infrastructure and facilities to reduce noise,	10	18	3	-	18-1
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.15 Noise Abatement Plan	v. A description of noise attenuation and minimization measures to be employed through choosing appropriate equipment, installation of noise silencing devices, scheduling of take-off and landing aircrafts, and blasting timing, and	10	18	3	-	18-1
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.15 Noise Abatement Plan	vi. Occupational related noise management programs.	10	18	3	-	19-1
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.16 Aquatic Effects Management Plan	The Proponent shall develop an Aquatic Effects Management Plan to provide information regarding proposed mitigation measures designed to protect and minimize the impacts on the aquatic system (freshwater and marine) from all project activities occurring in or near watercourses through all project phases, as well as those plans and programs designed to monitor potential effects to the aquatic system. This plan must include:	10	19	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.16 Aquatic Effects Management Plan	i. Applicable standards, guidelines and regulations,	10	19	4	-	19-2
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.16 Aquatic Effects Management Plan	ii. Erosion and sediment control measures for works in or near waterbodies and watercourses,	10	19	6.1.2	-	19-4
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.16 Aquatic Effects Management Plan	iii. Measures to be applied to protect fish, aquatic biota, and the habitat of both during blasting in or near freshwater and marine environments,	10	19	6.1.3	-	19-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.16 Aquatic Effects Management Plan	iv. A description of the fish-out program proposed for the removal of fish from the lakes that are proposed to be dewatered during construction of the mine and the tailings impoundment area,	10	19	6.1.4	-	19-9 to 19-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.16 Aquatic Effects Management Plan	v. Monitoring and reporting protocols as per the Environmental Effects Monitoring (EEM) program of the Metal Mining Effluent Regulations (EC, 2011),	10	19	7.2.4	-	19-20
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.16 Aquatic Effects Management Plan	vi. A description of monitoring study design and field methods, including indicators to be measured, sampling frequency and methods, timing, spatial extent and Universal Transverse Mercator (UTM) coordinates of sampling locations for each aquatic sampling location, and	10	19	7	-	19-13 to 19-33
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.16 Aquatic Effects Management Plan	vii. A description of how indicators, sampling design, methodology and the analysis will be appropriate and adequate to detect spatial and temporal project related impacts on the aquatic ecosystem and provide statistically rigorous tests of impact prediction presented in the EIS.	10	19	7	-	19-13 to 19-33
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	The Proponent shall develop a Wildlife Mitigation and Monitoring Plan in consultation with Government of Nunavut-Department of Environment (GN-DOE), Fisheries and Oceans Canada (DFO), Environment Canada (EC), and other relevant agencies or organizations. This plan must include appropriate mitigation and monitoring for selected terrestrial and marine species, with consideration for potential impacts identified in the relevant subsections of the EIS. This plan is required to include the following:	10	20	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	i. A description of the LSA and the RSA for wildlife mitigation and monitoring programs,	10	20	7.1.4	-	20-21
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	ii. Selection criteria and rationales for wildlife species selected for monitoring and mitigation programs,	10	20	2, 3, 4, 6, 7.1	-	20-1 to 20-21
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	iii. A description of how TK collected by the Proponent has been integrated into baseline data collection, impact predictions and significance determinations, and the development of mitigation and monitoring programs,	10	20	1.1	-	20-1
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	iv. Details regarding plans for involvement of local hunters in wildlife baseline studies and monitoring program if applicable, including the mechanisms and resources allocated for local participation,	10	20	7.1.2	-	20-20
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	v. Plans for coordinating wildlife studies/monitoring activities with other organizations, institutions, government departments and/or individual researchers conducting wildlife studies in the RSA, to minimize the impacts on wildlife from studies/survey activities,	10	20	7.1	-	20-19 to 20-21

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	vi. A discussion of how terrestrial wildlife surveys, particularly low elevation caribou surveys, and monitoring protocols (including data confidentiality) will be designed to mitigate potential impacts on terrestrial mammals, in particular caribou,	10	20	7.3	-	20-37 to 20-63
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	vii. A description of monitoring study design and field methods, including indicators to be measured, sampling frequency and methods, timing, spatial extent, and Universal Transverse Mercator (UTM) coordinates of transect lines if applicable, for each wildlife species to be monitored,	10	20	7.2, 7.3	-	20-21 to 20-63
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	viii. A description of how indicators, sampling design, methodology and analysis will be appropriate and adequate to detect spatial and temporal project-related impacts on wildlife and provide statistically rigorous tests of impact predictions presented in the EIS,	10	20	7.2, 7.3	-	20-21 to 20-63
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	ix. Measures to be applied to avoid or reduce the disturbance, harassment, injury or mortality of marine mammals due to shipping activities,	10	15	11	-	15-15
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	x. Measures to be applied to avoid or reduce the disturbance, harassment, injury or mortality of terrestrial wildlife due to Project activities, including measures to prevent wildlife from entering pit areas and birds from landing on tailings impoundment area,	10	20	6	-	20-4 to 20-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	xi. Measures to minimize noise disturbance to wildlife and hunters/travellers when conducting aerial wildlife surveys,	10	20	7.3	-	20-37 to 20-63
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	xii. Procedures and structures designed to mitigate/manage potential impacts to wildlife and wildlife movement (e.g. caribou crossings and migration routes) during construction and operations,	10	20	6.2, 6.4	-	20-2 to 20-7, 20-11 to 20-13
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	xiii. Plans to facilitate the safe passage of wildlife across the all-weather access road and associated mitigation measures to prevent collisions with wildlife,	10	20	6.2, 6.4	-	20-2 to 20-7, 20-11 to 20-13
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	xiv. Plans and measures to avoid or reduce the potential for Project activities to act as an attractant to wildlife species and to avoid and reduce injury, illness or mortality of wildlife (including intentional killing of wildlife by mine personnel to defend human life or property),	10	20	6.3	-	20-9 to 20-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	xv. A description of data analysis methods, triggers/thresholds for adaptive management plans, and proposed mitigation measures,	10	20	7.3	-	20-37 to 20-63
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	xvi. A mechanism for the evaluation of effectiveness of mitigation measures,	10	20	9	-	20-63
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	xvii. Quality assurance and quality control measures, and	10	20	13	-	20-65
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.17 Wildlife Mitigation and Monitoring Plan	xviii. Reporting and plan updating procedures.	10	20	11	-	20-64
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	The Proponent shall present a No Net Loss Plan (NNLP) to discuss measures to be implemented for off set of the loss of aquatic habitat due to Project activities and components. This plan should include the principle of No Net Loss for fish habitat as outlined in the Policy for the Management of Fish Habitat (DFO, 1986), and shall include, where appropriate, habitat replacement options and monitoring programs and off set plans as developed in consultation with DFO and KIA. The No Net Loss Plan shall discuss the following:	10	21	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	i. Requirements of related DFO policies,	10	21	1.3.1.1, 1.3.2, 2.2.2, 3.1, 4.4	-	1-5 to 1-7, 2-15 to 2-24, 3-1 to 3-2, 4-10 to 4-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	ii. The estimate of total fish habitat loss and methods used for estimations,	10	21	2	-	2-1 to 2-24
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	iii. Plans to off-set losses to fish habitat in order to achieve “No Net Loss” of fish habitat productive capacity,	10	21	3	-	3-1 to 3-15
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	iv. Procedures and structures designed to mitigate/manage potential impacts to fish and fish habitat during construction and operation including fishout programs of any drained lakes,	6 7 10	6, 7 4, 5 21	6.5.3, 6.8, 7.5.3, 7.8 4.5.3, 4.8, 5.5.3, 5.8 3.X, 4.4	-	6-63 to 6-67, 6-67 to 6-71, 7-39 to 7-42, 7-46 to 7-49 4-41 to 4-46, 5-22 to 5-25, 5-5-27 to 5-30 3-1 to 3-15, 4-10 to 4-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	v. Details regarding the proposed offsetting options, including locations and conceptual designs for implementation (e.g. rearing habitat, migration channels, etc.),	10	21	3.X	-	3-1 to 3-15
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	vi. A discussion on how TK was incorporated into the development of the No Net Loss Plan,	10	21	1.4	-	1-7 to 1-10
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	vii. A description of the location(s) of the tailings impoundment area and the fish habitat affected by the deposit,	10	21	2.2.2	-	2-18
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	viii. A description of the measures to be taken to mitigate any potential adverse effect on the fish habitat that could result from plan implementation,	10	21	3.X, 4.X	-	3-1 to 3-15, 4-1 to 4-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	ix. A description of measures to be taken to monitor plan implementation,	10	21	4.1, 4.2	-	4-1 to 4-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	x. A description of the measures to be taken to verify the extent to which the plan’s purpose has been achieved,	10	21	4.1, 4.2	-	4-1 to 4-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	xi. A description of the time schedule for plan implementation, which shall provide for achievement of the purpose of the plan within a reasonable time, and	10	21	4.1, 4.2	-	4-1, 4-2
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.4 BIOPHYSICAL MANAGEMENT PLANS	9.4.18 No Net Loss Plan	xii. A description of the consultation efforts for the No Net Loss Plan for the tailings impoundment area, including KIA, DFO and other affected parties, including overall effort and opportunities for parties to provide options for offsetting predicted impacts to fish and fish habitat.	10	21	1.4	Ongoing consultation regarding the Conceptual Fish Offsetting Plan is intended through 2014 and will be included in the FEIS	1-10

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS		The Proponent shall present plans, policies and programs to minimize potential negative socio-economic effects and to optimize the potential positive effects of the Project. Socio-economic management plans shall be developed and organized to correspond with the socio-economic impact assessment described in Section 8.2. Plans should reflect the complete life span of the Project, and contain appropriate monitoring and evaluation techniques (e.g. indicators) that will allow regulators to intervene in a timely and constructive manner.	10	23, 24, 26, 28	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS		The Proponent shall describe its socio-economic mitigation and monitoring plans and mitigation programs, including how they will identify, react and mitigate potentially adverse socio-economic impacts and augment positive socio-economic impacts.	8 10	3 23, 24, 26, 28	3.8, 3.9 All	-	3-110 to 3-113, 3-113 to 3-115 All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS		In consultation with the Kitikmeot Socio-Economic Monitoring Committee (SEMC), the Proponent should clearly identify the role it will take in regional monitoring initiatives, including how its monitoring plans will align with those of the regional SEMC. The Proponent may also use experience from other projects or jurisdictions regarding the success of such mitigation measures as part of the Proponent’s assessment of impacts and development of these plans.	10	23	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS		The Proponent shall outline how the predominant regional language/dialect in the RSA will be incorporated into each respective plan. The management plans shall include, but are not limited the following individual plans:	8	3	3.8	-	3-110 to 3-113
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.1 Business Development Plan	The Proponent shall provide a Business Development Plan that includes, but is not limited to:	10	24	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.1 Business Development Plan	i. Commitments (e.g., workforce percentage) and strategies for local/regional preferential hiring and contracting,	10	24	7.1	Commitments are not provided in the plan, this will be a topic of discussion during Inuit Impact Benefit Agreement (IIBA) negotiations between Sabina and the KIA	24-5 to 24-6
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.1 Business Development Plan	ii. Strategies for building capacity for local businesses and entrepreneurs,	10	24	7.2	-	24-8
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.1 Business Development Plan	iii. Communication methods to share information on opportunities with local or regional businesses,	10	24, 26	7.1, 7.4	-	24-5 to 24-6, 26-8
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.1 Business Development Plan	iv. Community-based investment or initiatives that may lead to economic diversity, and	10	24	7.3	-	24-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.1 Business Development Plan	v. A discussion on what efforts the Proponent will undertake to ensure project-specific benefits can remain in the Kitikmeot region and/or in Nunavut.	10	24	7.1	-	24-5 to 24-6
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.2 Occupational Health and Safety Plan	The Proponent shall present an Occupational Health and Safety Plan focusing on the following elements in conjunction with its Spill Contingency Plan, Risk Management Plan, Noise Abatement Plan, and any other relevant plans:	10	25	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.2 Occupational Health and Safety Plan	i. An overview of the occupational health and safety program for the activities and works being proposed,	10	25	1	-	25-1 to 25-3
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.2 Occupational Health and Safety Plan	ii. Policies and guidelines regarding interaction with Nunavut’s medical health system including the provision of relevant health and safety information regarding hazardous materials, including Material Safety Data Sheets to the appropriate health centers and any emergency response staff,	10	25	3.12	-	25-10
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.2 Occupational Health and Safety Plan	iii. Safety and management procedures related to hazardous chemical, physical, and biological agents and materials, including their manufacture, storage, use and disposal,	10	25	3.1	-	25-4 to 25-5
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.2 Occupational Health and Safety Plan	iv. Best safety practices and safety awareness programs,	10	25	3.7	-	25-8
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.2 Occupational Health and Safety Plan	v. An overview of the workplace conditions, such as accommodation, food/nutrition, health and safety, alcohol/drug/smoking policies, and recreation,	10	25	3.13	Table 3.13-2	25-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.2 Occupational Health and Safety Plan	vi. Employee involvement and related training programs for ensuring awareness of employee responsibilities in environmental and health and safety management, including roles pertaining to safety orientation, hazard analysis, first-aid training, human-wildlife encounters and protocols to follow, etc.,	10	25	3.8	-	25-8
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.2 Occupational Health and Safety Plan	vii. Risk management and safety management details regarding the preparedness of mine safety equipment and devices,	10	25	3	-	25-4 to 25-14
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.2 Occupational Health and Safety Plan	viii. Procedures for emergency incidence reporting and actions including procedures for medical transport of injured staff or persons, including transport from the location of the incident to help, ambulance or medical transportation onsite, and medevac to local health center, hospital, or referral south,	10	25	3.9, 3.11	-	25-9, 25-10
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.2 Occupational Health and Safety Plan	ix. Details regarding workplace monitoring and control, and	10	25	3.1, 3.13	-	25-5, 25-11 to 25-13
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.2 Occupational Health and Safety Plan	x. First aid training and occupational medical surveillance.	10	25	3.12	-	25-10 to 25-11

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	The Proponent shall present a Community Involvement Plan which discusses the following:	10	26	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	i. Provision of a clear definition of public and community for the purposes of the Community Involvement Plan,	10	26	7	-	26-4 to 26-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	ii. Mechanisms for providing information to the public and potentially affected communities regarding regular updates of Project’s progress, initiatives and future work plans (e.g. training opportunities, hiring information, etc.),	10	26	7.1, 7.2	-	26-5 to 26-7
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	iii. Plans and procedures for communicating with the public and Project employees during any temporary closure or slowdown periods,	10	26	7.1	-	26-5 to 26-6
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	iv. Methods and procedures for establishing effective two-way communications for collecting and addressing public concerns,	10	26	7.3	-	26-8
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	v. Methods to evaluate public engagement efforts in order to identify the effectiveness of the plan,	10	26	7.3	-	26-8
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	vi. Measures to assist communities with addressing potential social needs and problems related to the Project, including proposed counselling services for employees and their families regarding matters such as substance abuse, work-related stress management, family support, etc.,	10	26	7.4	-	26-8
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	vii. An approach to promoting the participation of Nunavummiut in project employment, including any preferential recruitment policies or practices,	10	26	7.4	-	26-8
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	viii. Plans for promoting local contracting opportunities and purchasing of local products (e.g. country foods),	10	26	7.4	-	26-8
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	ix. A discussion of how input from communities has influenced the design and implementation of monitoring plans and initiatives,	10	26	7.2	-	26-7
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	x. A discussion of communications procedures for the Proponent and members of affected communities to disseminate Project monitoring results and Project information on social, cultural, and ecological conditions, and	10	26	7.5	-	26-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.3 Community Involvement Plan	xi. A discussion of procedures for community-based monitoring of social, cultural, and ecological conditions to determine if, when, and how the Project contributes to community sustainable development.	10	26	7.5	-	26-9
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.4 Cultural and Heritage Resources Protection Plan	The Proponent shall, in consultation with the Government of Nunavut-Department of Culture and Heritage, present a Cultural and Heritage Resources Protection Plan which includes the following:	10	27	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.4 Cultural and Heritage Resources Protection Plan	i. Applicable regulations and guidelines for management of potential impacts to identified cultural and heritage resources,	10	27	2	-	27-1
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.4 Cultural and Heritage Resources Protection Plan	ii. Results of archaeological investigations and studies,	10	27	1, 3, 8	-	27-1, 27-8 to 27-13
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.4 Cultural and Heritage Resources Protection Plan	iii. Inventory of known archaeological resources in Project areas,	8 10	1 27	1.5 3	-	1-15 to 1-32 27-1 to 27-2
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.4 Cultural and Heritage Resources Protection Plan	iv. A discussion of how the results from the Proponent’s impact assessment have been considered and incorporated into the plan, and	10	27	3	-	27-1
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.4 Cultural and Heritage Resources Protection Plan	v. General and site-specific measures for the protection of archaeological sites and mitigation of potential adverse impacts.	10	27	3, 4	-	27-1 to 27-2
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	The Proponent shall develop a Human Resource Plan, consulting with relevant GN departments where applicable, which includes the following:	10	28	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	i. Applicable human resources legislation, the Proponent’s understanding of labour standards practices and how the Proponent will meet the requirements developing employment policies and the Proponent’s policies on compensation and benefit programs (e.g. health care plan, insurance, vacation/maternity leave, etc.),	10	28	3, 7.1	-	28-2 to 28-5, 28-8 to 28-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	ii. Recruitment strategies with communities that includes regular information updates regarding employment/training opportunities, hiring plans and time schedules, etc.,	10	28	7.2	-	28-12 to 28-13
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	iii. A strategy discussing steps to reduce labour force entry barriers and improvement to employee retention,	10	28	3.1, 7.1	-	28-2 to 28-5, 28-8 to 28-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	iv. Any plans for training programs designed to assist the local labour force with potential employment at the mine (e.g. partnerships with local schools and other educational institutions, on-the-job learning, and apprenticeships),	10	28	7.3	-	28-13 to 28-15
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	v. Education and Orientation Plan to assist employees to understand their responsibilities in environmental protection and health and safety management, and to provide cultural and financial management training,	10	28	7.1	-	28-8 to 28-11

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	vi. Worker rotation and pay schedules, health and safety programs, preferential recruitment policy, gender equality, skills and entry requirements, training, career development, and counselling programs available for employees,	10	28	7	-	28-8 to 28-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	vii. A discussion of how the planned work schedules that are adapted to traditional activities, whether the Proponent will provide no-cost commuting to allow workers to continue to live in their own communities and to participate in their traditional economic and cultural activities,	10	28	7.1	-	28-8 to 28-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	viii. Policies regarding onsite public safety and wellbeing, cross-cultural orientation, firearms control, sexual and gender harassment, alcohol and drug control measures, reporting of incidents involving drugs/alcohol, smoking policies, gambling activities, and supply of country food to Inuit workers at the mine site.,	10	28	3.1, 7.1	-	28-2 to 28-5, 28-8 to 28-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	ix. Details on any priorities for Inuit, northerners, etc. or other staffing measures targeting categories of individuals,	10	28	3.1, 7.2	-	28-2 to 28-5, 28-12 to 28-13
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	x. Recognition and management plans regarding the rights and needs of hunting activities and traveling through Project areas by the residents from adjacent communities,	10	28	3.1	-	28-2 to 28-5
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	xi. Strategies for communicating relevant information of IIBA terms and conditions to employees,	10	28	7.1	-	28-8 to 28-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	xii. Policies and regulations regarding hunting and fishing by non-Inuit employees, while respecting the rights and needs of Inuit employees to harvest and pursue traditional activities, with a discussion of how such policies or regulations were designed to manage potential impacts to fisheries or wildlife resources,	10	28	3.1	-	28-2 to 28-5
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	xiii. A discussion of any proposed policies or regulations regarding the prohibition of recreational hunting, fishing and other related activities by employees at specific locations and timing in Project area, and	10	28	3.1	-	28-2 to 28-5
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.5 SOCIO-ECONOMIC MANAGEMENT PLANS	9.5.5 Human Resources Plan	xiv. Skill transferability training and employment counselling upon mine closure and during temporary mine closures.	10	28	7.4	-	28-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		The Proponent shall develop a preliminary Mine Closure and Reclamation Plan for the Project which outlines how the various components set out in Section 6.0 will be decommissioned, reclaimed and closed following mine closure. The plan can be preliminary with key issues addressed for the environmental assessment in the NIRB's review, with the following requirements:	10	29	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		i. To ensure that issues associated with the effective closure and reclamation of all Project components are considered at the earliest possible stage in the mine development process, thereby influencing mine design to take into account environmental issues related to mine closure and reclamation.	10	29	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		ii. To establish goals and final land use objectives for reclamation of lands potentially affected by the Project,	10	29	1.7	-	29-11
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		iii. A description of reclamation methods, time frames and schedules, including proposed progressive reclamation, research programs, and notice periods to employees and public,	10	29	1.3, 3, 4	Table 3.1	29-3, 29-17 to 29-30
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		iv. A description of temporary closure measures and a discussion of at what point a temporary closure should be considered permanent for the purposes of requiring implementation of the Mine Closure and Reclamation Plan,	10	29	2	-	29-13 to 29-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		v. A discussion of research programs to address challenges to reclamation, given the local conditions,	10	29	1.5, 3	Table 3.1	29-5 to 29-6, 29-18
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		vi. Considerations for the protection of public health and safety,	10	29	1.9, 2.2, 4.15	-	29-13, 29-14, 29-30
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		vii. A description of the estimated contaminant and other material (physical and chemical) levels in the environment after mine closure and remediation,	10	29	4.15	-	29-18 to 29-34
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		viii. A description of closure and post-closure monitoring of environmental components including, but not limited to, wildlife, vegetation, air quality, landform stability and water quality,	10	29	4, 5.2	-	29-18 to 29-37
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		ix. A discussion on the long-term monitoring and maintenance that may be required once physical and chemical stability of reclaimed areas have been established,	10	29	4.15, 5.2	-	29-30, 29-33
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		x. A discussion on reduction or elimination of environmental effects once the mine ceases operation,	10	29	4.14	-	29-33 to 29-34
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		xi. A discussion regarding re-establishing conditions that permit the land to return to a similar pre-mining land use,	10	29	4.15	-	29-34
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		xii. Considerations for ARD and/or ML potential of rocks and tailings, in association with related waste rock and tailings management strategies,	10 11	3, 29 4	3.2, 1.5.4 4.5	-	3-9 to 3-16, 29-5 4-44 to 4-46
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		xiii. Any considerations for the restoration of the natural aesthetics of the Project, and	10	29	1.7, 4.15	-	29-12, 29-30 to 29-34

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN		xiv. The Plan is to be considered a “living” document, the level of detail should undergo further revision to reflect the progress of the Project as well as changes in technology and/or standards or legislation. This plan should include the establishment of thresholds and identified adaptive management responses should such thresholds be reached. Future revisions should also consider input from consultations with communities and other stakeholders on methods to be used, and potential uses for project infrastructure, etc.	10	29	1.8	-	29-12
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.6 MINE CLOSURE AND RECLAMATION PLAN	9.6.1 Care and Maintenance Plan	A preliminary Care and Maintenance Plan shall be developed for the Project in conjunction with the Mine Closure and Reclamation Plan which outlines how the various components set out in Section 6.0 will be treated in the event of a temporary closure or un-timely closure of the project. The plan can be preliminary with key issues addressed for the environmental assessment in the NIRB’s review and should include a discussion on the items listed in Section 9.6.	10	29	2	-	29-14 to 29-16
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.7 FOLLOW-UP AND ADAPTIVE MANAGEMENT PLANS		A follow-up plan is a formal, ongoing process to verify the accuracy of the environmental impact predicted in the environmental assessment and permitting stage of the Project, and to determine the effectiveness of proposed mitigation measures. If either of these two steps identifies unusual and unforeseen adverse environmental effects, then the existing mitigation measures must be adjusted, or if necessary, an adaptive management plan with new mitigation or compensation measures must be developed. Adaptive management planning is particularly important for the areas where scientific uncertainty exists in the prediction of adverse effects. In order to offset the likelihood of mitigation failure and the potential severity of the consequences, the Proponent shall formulate a process through which the information related to effectiveness of mitigation measures is analyzed and associated adaptive measures would be employed in the environmental management system:	-	-	-	-	-
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.7 FOLLOW-UP AND ADAPTIVE MANAGEMENT PLANS		i. The need for such a follow-up and adaptive management plan and its objectives,	10	1	14	-	1-15 to 1-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.7 FOLLOW-UP AND ADAPTIVE MANAGEMENT PLANS		ii. How this plan will be structured including responses to any enforcement action or penalties for non- compliance,	10	1	14	-	1-15 to 1-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.7 FOLLOW-UP AND ADAPTIVE MANAGEMENT PLANS		iii. Which elements of the monitoring program described in Section 9.3, would be incorporated,	10	1	14	-	1-15 to 1-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.7 FOLLOW-UP AND ADAPTIVE MANAGEMENT PLANS		iv. The mechanisms, through which monitoring results will be analysed, and if necessary, adjusted mitigation measures or adaptive management plan will be employed. In addition, how the effectiveness of the new mitigation measure will be assessed and verified,	10	1	14	-	1-15 to 1-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.7 FOLLOW-UP AND ADAPTIVE MANAGEMENT PLANS		v. The roles to be played by the Proponent, regulatory agencies, and others in such a plan, and possible involvement of independent researchers,	10	1	14	-	1-15 to 1-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.7 FOLLOW-UP AND ADAPTIVE MANAGEMENT PLANS		vi. The sources of funding for the plan and reporting,	10	1	14	-	1-15 to 1-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.7 FOLLOW-UP AND ADAPTIVE MANAGEMENT PLANS		vii. How an increased and perhaps unforeseen cost associated in a plan would be managed in implementing such measures, and	10	1	14	-	1-15 to 1-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.7 FOLLOW-UP AND ADAPTIVE MANAGEMENT PLANS		viii. The quantitative triggers or thresholds that will indicate the need to alter or vary the management plan or mitigation measures.	10	1	14	-	1-15 to 1-19
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.8 SIGNIFICANCE OF RESIDUAL IMPACTS		After having established the mitigation measures, the EIS shall present the residual effects assessment of the Project on the components of the biophysical and human environments, so that the reader can clearly understand the real consequences of the Project, the degree of mitigation of the effects and which effects cannot be mitigated or compensated for.	1 4 5 6 7 8	6, 8 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	All	-	All
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.8 SIGNIFICANCE OF RESIDUAL IMPACTS		The Proponent should include a summary table in this section of its EIS, which presents the effects before and after mitigation on the various components of the environment, the mitigation measures applied and the residual effects have been assessed.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5, X.6, X.7, X.8, X.9, X.10	Exceptions: no Section X.5.10 for Volume 6 Chapter 1; Additional Section X.5.11 for Volume 6 Chapter 4, and Volume 7 Chapters 6 and 7, and Volume 8 Chapter 1	1-15 to 1-30, 2-11 to 2-37 4-26 to 4-71, 5-83 to 5-156, 6-35 to 6-84, 7-19 to 7-67, 8-30 to 8-95, 9-30 to 9-63, 10-21 to 10-56 1-41 to 1-53, 4-35 to 4-64, 5-21 to 5-45, 6-53 to 6-72, 7-35 to 7-51 2-16 to 2-44, 3-12 to 3-35, 4-36 to 4-47, 5-19 to 5-32, 6-18 to 6-57, 7-15 to 7-49 1-15 to 1-35, 3-37 to 3-116, 4-32 to 4-81, 5-19, to 5-44
9.0 ENVIRONMENTAL MANAGEMENT SYSTEM	9.8 SIGNIFICANCE OF RESIDUAL IMPACTS		The determination of significance of residual impact shall take into account the attributes of each impact in accordance with the criteria established in Section 7.14.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5, X.6, X.7, X.10	Exception: Volume 5 Chapter 4 Section X.9, and Volume 8 Chapter 5 Section X.9 (instead of X.10)	1-15 to 1-29, 1-30, 2-11 to 2-35, 2-37 4-26 to 4-68, 4-70, 5-83 to 5-147, 5-155 to 5-156, 6-35 to 6-76, 6-83 to 6-84, 7-19 to 7-61, 7-66 to 7-67, 8-30 to 8-88, 8-94 to 8-95, 9-30 to 9-56, 9-62 to 9-63, 10-21 to 10-50, 10-55 to 10-56 1-41 to 1-52, 1-53, 4-35 to 4-58, 4-62, 5-21 to 5-41, 5-45, 6-53 to 6-67, 6-72, 7-35 to 7-46, 7-50 to 7-51 2-16 to 2-40, 2-44, 3-12 to 3-31, 3-35, 4-36 to 4-43, 4-46 to 4-47, 5-19 to 5-27, 5-31 to 5-32, 6-18 to 6-44, 6-50, 7-15 to 7-36, 7-42 1-15 to 1-33, 1-35, 3-37 to 3-109, 3-115 to 3-116, 4-32 to 4-76, 4-80 to 4-81, 5-19 to 5-43, 5-44

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
10.0 CONCLUSION			The EIS should end with a conclusion presenting a summary analysis of the overall projected biophysical and socio-economic impacts, anticipated transboundary and cumulative effects, proposed mitigation measures, and residual impacts. While highlighting the impacts in the Kitikmeot Region, this conclusion should clearly present the importance of the EIS findings to the NSA and Canada.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5, X.6, X.7, X, X.9, X.10	Exceptions: no Section X.5.10 for Volume 6 Chapter 1; Additional Section X.5.11 for Volume 6 Chapter 4, and Volume 7 Chapters 6 and 7, and Volume 8 Chapter 1	1-15 to 1-30, 2-11 to 2-37 4-26 to 4-71, 5-83 to 5-156, 6-35 to 6-84, 7-19 to 7-67, 8-30 to 8-95, 9-30 to 9-63, 10-21 to 10-56 1-41 to 1-53, 4-35 to 4-64, 5-21 to 5-45, 6-53 to 6-72, 7-35 to 7-51 2-16 to 2-44, 3-12 to 3-35, 4-36 to 4-47, 5-19 to 5-32, 6-18 to 6-57, 7-15 to 7-49 1-15 to 1-35, 3-37 to 3-116, 4-32 to 4-81, 5-19 to 5-44
11.0 LIST OF CONSULTANTS AND ORGANIZATIONS			The Proponent shall prepare a list of all the consultants who contributed to the preparation of the EIS, including the role of each and contact information in an appendix to the EIS. In addition, the Proponent shall prepare a list of organizations consulted in preparing this EIS where such consultations provided materials as included as supporting documentation or evidence within the EIS, including the time, place, and purpose of the consultation, reference materials provided, and contact information for the organization.	1 3	Appendix V1-4 Appendices V3-1A, V3-1B, V3-1C, V3-1E, V3-1G, V3-2A	All	-	Appendix V1-4 Appendices V3-1A, V3-1B, V3-1C, V3-1E, V3-1G, V3-2A
APPENDIX A: NUNAVUT IMPACT REVIEW BOARD'S 10 MINIMUM EIS REQUIREMENTS			The following are the minimum required elements for an Environmental Impact Statement required under a Part 5 Review:	-	-	-	-	-
			1. Statement of Consultation Principles and Practices	-	-	-	-	-
			The Proponent must conduct pre-Project consultations with locally affected persons. Where at all possible, information about the Project must be distributed, and comments collected with a view to resolving any differences. Discussions should include, but not be limited to, land uses, policies, resource uses, Archaeological areas, infrastructure, and terrain sensitivities. Aboriginal cultural concerns must be highlighted throughout. The Proponent shall explain where, how, why, and with whom it conducted public consultation, and shall demonstrate an understanding of the rights, interests, values, aspirations, and concerns of the potentially affected communities. All comments from the public must be summarized, documented, and presented in the EIS.	3	1, Appendices V3-1A, V3-1B, V3-1C, V3-1D, V3-1E, V3-1F, V3-1G	All, Appendices V3-1A, V3-1B, V3-1C, V3-1D, V3-1E, V3-1F, V3-1G	-	All, Appendices V3-1A, V3-1B, V3-1C, V3-1D, V3-1E, V3-1F, V3-1G
			2. Definition of Project	-	-	-	-	-
			A definition of the Project must include a discussion of any connected or subsequently related projects in order to reveal the primary purpose and better understand complex or multi-staged related proposals.	2	1, 2, 3	All	-	All
			3. Statement of Project's Purpose	-	-	-	-	-
			Based on the concepts of the Precautionary Principle and Sustainable Development, an EIS must contain a statement explaining the need for, and the purpose of the Project. Where further economic development is needed for a given area, the Board expects the deficiencies in the economic status quo to be stated.	2	1	1.8	-	1-6 to 1-19
			4. Anticipated Impacts Analysis	-	-	-	-	-
			A comprehensive impact assessment must be carried out which includes, but is not limited to, environmental effects that are likely to result from the Project in combination with other projects or activities that have been, or will be, carried out. Anticipated impacts include short and long- term, direct and indirect, positive and negative, cumulative, socio-economic, archaeological and cultural impacts. This element of the EIS must include a mitigation analysis that explains how the impacts could be avoided, minimized, cured, eliminated, or compensated.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.5, X.6, X.7, X.8, X.9, X.10	Exceptions: no Section X.5.10 for Volume 6 Chapter 1; Additional Section X.5.11 for Volume 6 Chapter 4, and Volume 7 Chapters 6 and 7, and Volume 8 Chapter 1	1-15 to 1-30, 2-11 to 2-37 4-26 to 4-71, 5-83 to 5-156, 6-35 to 6-84, 7-19 to 7-67, 8-30 to 8-95, 9-30 to 9-63, 10-21 to 10-56 1-41 to 1-53, 4-35 to 4-64, 5-21 to 5-45, 6-53 to 6-72, 7-35 to 7-51 2-16 to 2-44, 3-12 to 3-35, 4-36 to 4-47, 5-19 to 5-32, 6-18 to 6-57, 7-15 to 7-49 1-15 to 1-35, 3-37 to 3-116, 4-32 to 4-81, 5-19 to 5-44
			5. Cumulative Effects Analysis (CEA)	-	-	-	-	-
			Cumulative Effects must be analyzed for all Part 5 Reviews. A project proposal causes a Cumulative Effect if, when added to other projects in the region, or projects reasonably foreseeable in the region, will cause an additive effect. A comprehensive examination of all Cumulative Effects must be included in an EIS.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.6	-	1-28 to 1-29, 2-33 to 2-35 4-62 to 4-68, 5-114 to 5-147, 6-62 to 6-76, 7-45 to 7-60, 8-65 to 8-88, 9-54 to 9-56, 10-48 to 10-50 1-51 to 1-52, 4-56 to 4-58, 5-39 to 5-41, 6-67, 7-44 to 7-45 2-39 to 2-40, 3-29 to 3-31, 4-43, 5-25 to 5-27, 6-35 to 6-44, 7-36 1-32 to 1-33, 3-92 to 3-106, 4-58 to 4-73, 5-43
			6. Significant Effects Analysis	-	-	-	-	-
			The Board must be advised of the significant impacts of the Project. This should be based upon:	-	-	-	-	-
			a. the Project setting, taking into account the location's unique ecosystemic characteristics, and	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.1	-	1-1 to 1-10, 2-1 to 2-6 4-1 to 4-17, 5-1 to 5-74, 6-1 to 6-19, 7-1 to 7-12, 8-1 to 8-23, 9-1 to 9-25, 10-1 to 10-15 1-1 to 1-31, 4-1 to 4-30, 5-1 to 5-17, 6-1 to 6-46, 7-1 to 7-28 2-1 to 2-14, 3-1 to 3-10, 4-1 to 4-30, 5-1 to 5-11, 6-1 to 6-13, 7-1 to 7-7 1-1 to 1-11, 3-1 to 3-22, 4-1 to 4-21, 5-1 to 5-12
			b. the severity of the impacts, taking into account, but not limited to public health, land use plans, protected areas, habitat, or species, public concern, etc.	3 4 5 6 7 8	1, 3 1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	1.6.2, 3.3 X.5.4, X.5.5 X.5.4, X.5.5 X.5.4, X.5.5 X.5.4, X.5.5 X.5.4, X.5.5	Exceptions: no Section X.5.5 for Volume 7 Chapters 4 and 7; Volume 8 Chapter 3 Section X.5.5 and X.5.6 (instead of X.5.4 and X.5.5)	1-35 to 1-36, 3-40 1-26 to 1-27, 2-32 to 2-33 4-33 to 4-61, 5-112 to 5-114, 6-59 to 6-62, 7-43 to 7-45, 8-62 to 8-65, 9-52 to 9-54, 10-45 to 10-48 1-45 to 1-51, 4-53 to 4-56, 5-36 to 5-39, 6-67, 7-44 2-34 to 2-39, 3-27 to 3-29, 4-43, 5-25, 6-35 to 6-44, 7-36 1-30 to 1-32, 3-86 to 3-92, 4-53 to 4-58, 5-31 to 5-43
			Ultimately, the Board will decide which effects are significant and report to the Minister accordingly.	Noted	-	-	-	-
			7. Project Alternatives	-	-	-	-	-

Appendix V1-1. Table of Concordance

Guidelines Section			Guidelines Text	DEIS Volume	DEIS Chapter	DEIS Section	Comments	Page Numbers
Part	Section	Subsection						
			This requirement includes, but goes well beyond, alternative means of carrying out the Project that might be economically and technically feasible and the environmental effects of those alternative means. This assessment must include the “no-go” or “no-build” alternative, as well as the “preferred” alternative. The “no-go” alternative is not only a potentially stand-alone option, it also serves as a baseline for comparison with other development alternatives that might reasonably be proposed in the circumstances. Environment Canada’s Guidelines for the Assessment of Alternatives for Mine Waste Disposal (EC, 2011) may also be used by the Proponent in their assessment.	2	4	4.3	See also Volume 11 Water Licence SIG	4-13 to 4-22
			8. Sustainability Analysis	-	-	-	-	-
			The EIS must contain an analysis of the ability of renewable resources affected by the Project to sustain current and future generations in Nunavut and Canada.				This will be further addressed in detailed design, FEIS	
			9. Monitoring or Post-Project Analysis (PPA)	-	-	-	-	-
			The purposes of a PPA are to:	-	-	-	-	-
			a. measure the relevant effects of projects on the ecosystemic and socio-economic environments of the Nunavut Settlement Area,	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.9	Except X.8 for Volume 6 Chapter 1, and Volume 8 Chapter 5	1-30, 2-36 to 2-37 4-70 to 4-71, 5-153 to 5-155, 6-81 to 6-83, 7-65 to 7-66, 8-92 to 8-94, 9-60 to 9-62, 10-54 to 10-55 1-53, 4-62, 5-45, 6-71 to 6-72, 7-49 to 7-50 2-43 to 2-44, 3-35, 4-46, 5-31, 6-49 to 6-50, 7-41 to 7-42 1-34 to 1-35, 3-113 to 3-115, 4-79 to 4-80, 5-43
			b. determine whether and to what extent the land or resource use in question is carried out within the predetermined terms and conditions,	10	23	3.2	-	3-2 to 3-3
			c. provide the information base necessary for agencies to enforce terms and conditions of land or resource use approvals, and	10	9	9.2	-	9-11
			d. assess the accuracy of the predictions contained in the project impact statements.	4 5 6 7 8 10	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5 1	X.9 X.9 X.9 X.9 X.9 13, 14	Except X.8 for Volume 6 Chapter 1, and Volume 8 Chapter 5	1-30, 2-36 to 2-37 4-70 to 4-71, 5-153 to 5-155, 6-81 to 6-83, 7-65 to 7-66, 8-92 to 8-94, 9-60 to 9-62, 10-54 to 10-55 1-53, 4-62, 5-45, 6-71 to 6-72, 7-49 to 7-50 2-43 to 2-44, 3-35, 4-46, 5-31, 6-49 to 6-50, 7-41 to 7-42 1-34 to 1-35, 3-113 to 3-115, 4-79 to 4-80, 5-43 1-13 to 1-19
			10. Transboundary Effects Analysis	-	-	-	-	-
			Where relevant, an EIS must include an assessment of all significant adverse ecosystemic or socio-economic transboundary effects.	4 5 6 7 8	1, 2 4, 5, 6, 7, 8, 9, 10 1, 4, 5, 6, 7 2, 3, 4, 5, 6, 7 1, 3, 4, 5	X.7	-	1-29, 2-35 4-68, 5-147, 6-76, 7-61, 8-88, 9-56, 10-50 1-52, 4-58, 5-41, 6-67, 7-46 2-40, 3-31, 4-43, 5-27, 6-44, 7-36 1-33, 3-106 to 3-110, 4-73 to 4-76, 5-43

Appendix V1-2

List of Permits, Licences, and Authorizations Required for Project

Appendix V1-2. List of Permits, Licences, and Authorizations Required for Project

Legislation	Authorization	Responsible Authority	Project Activity
Nunavut Land Claims Agreement (Article 12)	Project Certificate	Nunavut Impact Review Board	Required to obtain requisite permits and approvals to proceed with Project
Nunavut Land Claims Agreement (Article 26)	Inuit Impact and Benefits Agreement	Kitikmeot Inuit Association	Required to proceed with Project
Nunavut Land Claims Agreement (Article 20)	Inuit Water Rights Compensation Agreement	Kitikmeot Inuit Association	May be required
Nunavut Land Claims Agreement (Article 6)	Wildlife Compensation Agreement	Kitikmeot Inuit Association	May be required
Nunavut Land Claims Agreement	Inuit Owned Lands - Commercial Land Use	Kitikmeot Inuit Association	Agreement to access surface Inuit Owned Lands for Project Infrastructure over Project life
Nunavut Land Claims Agreement	Inuit Owned Lands - Quarry Concession Licenses	Kitikmeot Inuit Association	Agreement to access to quarry locations on Inuit Owned Lands for Project infrastructure over Project life
Nunavut Land Claims Agreement (Article 13) <i>Nunavut Waters and Nunavut Surface Rights Tribunal Act</i> Nunavut Waters Regulations	Type A and B Water Licenses	Nunavut Water Board	Required for water use and waste disposal
<i>Territorial Lands Act</i> Canadian Mining Regulations	Prospector License Mineral leases	Aboriginal Affairs and Northern Development	To obtain and hold subsurface mineral rights
<i>Territorial Lands Act</i> Territorial Land Use Regulations	Crown Land - Class A and Class B Land Use Permits	Aboriginal Affairs and Northern Development	Agreement to access surface Crown lands for Project Infrastructure (winter road corridors) over Project life
<i>Territorial Lands Act</i> Territorial Land Use Regulations	Crown Land - Land lease and waterlot lease	Aboriginal Affairs and Northern Development	Agreement to access surface Crown lands for Project Infrastructure (Marine Laydown Area)over Project life
<i>Territorial Lands Act</i> Territorial Land Use Regulations Territorial Quarrying Regulations	Crown Land - Quarry Lease/Permit	Aboriginal Affairs and Northern Development	Agreement to access to quarry locations on Crown lands for Project infrastructure over Project life
<i>Navigable Waters Protection Act</i> (Section 5) <i>Navigation Protection Act</i>	Approval and/or Exemption	Transport Canada	construction of works in navigable water to protect navigation channels (Marine Laydown Area and water crossings)
<i>Fisheries Act</i> (Section 35(2))	Authorization for Harmful Alteration, Disruption, or Destruction (HADD) of Fish or Fish Habitat	Fisheries and Oceans Canada	Required if HADD cannot be avoided (e.g. Marine Laydown Area, Mine Infrastructure, water crossings). If HADD can be avoided, DFO may provide a letter of authorization in addition to compliance with Operational Statements
<i>Fisheries Act</i> Metal Mining Effluent Regulations	Schedule 2 Amendment	Environment Canada	
<i>Canadian Environmental Protection Act</i>	National Pollutant Registry Registration of Petroleum Product Storage	Environment Canada	Registration of incinerators and fuel storage systems on Crown land
<i>Explosives Act</i> and Regulations	License for a Factory and Magazine	Natural Resources Canada	Required for construction of explosives factoris and magazines and storage of explosives
Nunavut Archaeological and Palaeontological Sites Regulations (Nunavut) <i>Nunavut Historical Resources Act</i>	Archaeology Permit	Government of Nunavut - Heritage and Cultural Resources	Required to conduct archaeologysurveys and to mitigate cultrual/heritage resources
<i>Business Corporations Act</i> (Nunavut)	Business Registration	Government of Nunavut - Justice	Required to operate in Nunavut
<i>Labour Standards Act</i> (Nunavut)	Compliance with labour standards associated with work hours	Government of Nunavut - Justice	
<i>Engineers, Geologists and Geophysicists Act</i> (Nunavut)	Professional Engineer and Geoscientist Registration	Government of Nunavut - Justice	
<i>Scientist Act</i> (Nunavut)	Research/Monitoring Permit	Nunavut Research Institute	
<i>Environmental Protection Act</i> (Nunavut) Spill Contingency Planning and Reporting Regulations(Nunavut)	Approval of Spill Contingency Plan	Government of Nunavut - Environment	
<i>Environmental Protection Act</i> (Nunavut)	Hazardous Waste Generator	Government of Nunavut - Environment	
<i>Public Health Act</i> (Nunavut) Camp Sanitation Regulations (Nunavut)	Approval of camp facilities	Government of Nunavut - Health and Social Services	
<i>Emergency Medical Aid Act</i> (Nunavut)	Approval of emergnecy response and camp facilities	Government of Nunavut - Health and Social Services	
Building Codes (Nunavut)	Approval of camp facilities	Government of Nunavut - Community and Government Services	
<i>Fire Prevention Act</i> (Nunavut) Fire Prevention Regulations (Nunavut) Propane Cylinder Storage Regulations	Approval of camp facilities and propane storage	Government of Nunavut - Community and Government Services	
<i>Explosives Use Act</i> (Nunavut) Explosive Use Regulations (Nunavut)	Authorization to store and use explosives	Mine Health and Safety, Worker's Safety and Copmensation Commission of Nunavut	Required to store detonators in a magazine
<i>Mine Health and Safety Act</i> (Nunavut) Mine Health and Safety Regulations (Nunavut)	Authorization to store and use explosives	Mine Health and Safety, Worker's Safety and Copmensation Commission of Nunavut	Required to store detonators in a magazine
<i>Worker's Compensation Act</i> (Nunavut) Workers Compensation Regulations (Nunavut)	Authorization for Activities	Mine Health and Safety, Worker's Safety and Copmensation Commission of Nunavut	Required to proceed with Project activities

Appendix V1-3

Land and Water Interests

Appendix V1-3. Land and Water Interests

1.1 LAND TENURE

The Property comprises 45 federal mineral leases and 16 federal mining claims covering approximately 128,530 acres or 52,014 ha. The Property is divided into two projects: Goose and George and four exploration prospects: Boot, Boulder, Del, and Bath. All of the tenure is in good-standing and a description of the tenure type, size and ownership of each property is listed in Table 1.1-1. This table includes the six additional claims (11,917 acres) that Sabina staked for the Boulder prospect in 2012.

Table 1.1-1. Mineral Tenure Status (as of March 31, 2013)

Project/ Prospects	Tenure Name	Area (Acres)	Tenure Type	Registered Ownership as of March 31, 2013 Sabina/Status	Expiry/ Renewal Date
Goose	3694	1,032	Federal Mining Leases (7)	100%/in good standing	10/16/2018
	3695	1,013			10/16/2018
	3696	2,661			10/16/2018
	3697	2,721			10/16/2018
	3698	2,651			10/16/2018
	3699	2,479			10/16/2018
	3700	2,678			10/16/2018
	K12025	2,273	Federal Mining Claims (2)	100%/assessment work pending	5/19/2017
	K12026	1,636			5/19/2017
George	3562	171.7	Federal Mining Leases (19)	100%/in good standing	11/9/2015
	3598	974			12/28/2016
	3599	2,029			12/28/2016
	3600	2,493			12/28/2016
	3601	2,713			12/28/2016
	3602	2,540			12/28/2016
	3603	2,664			12/28/2016
	3604	1,112			12/28/2016
	3605	2,562			12/19/2017
	3606	2,654			12/19/2017
	3607	2,555			12/19/2017
	3608	2,613			12/19/2017
	3649	2,587			12/19/2017
	3650	494.4			12/28/2016
	3651	2,575			12/28/2016
	3653	2,656			12/19/2017
	3677	1,326			10/16/2018
	3729	274.3			10/16/2018
	3730	1,853			10/16/2018
	F98491	2,466.2	Federal Mining Claims (2)	100%/in good standing	11/25/2015
	F98492	2,195			11/25/2015

Table 1.1-1. Mineral Tenure Status (as of March 31, 2013)

Project/ Prospects	Tenure Name	Area (Acres)	Tenure Type	Registered Ownership as of March 31, 2013 Sabina/Status	Expiry/ Renewal Date
Boot	3552	2,543	Federal Mining Leases (10)	100%/in good standing	12/30/2017
	3553	2,560			12/30/2017
	3554	2,700			12/30/2017
	3555	2,506.6			12/30/2017
	3609	2,672			12/30/2017
	3612	2,668			12/30/2017
	3613	2,531			12/30/2017
	3678	2,621			10/16/2018
	3679	2,475			10/16/2018
	3724	1,338			10/16/2018
Boulder	3466	742	Federal Mining Leases (8)	100%/in good standing	11/18/2015
	3557	2,501			12/30/2017
	3558	2,598			12/30/2017
	3559	2,591			12/30/2017
	3560	2,717			12/30/2017
	3691	642			10/16/2018
	3692	1,128			10/16/2018
	3693	1,657			10/16/2018
	K12027	2,232	Federal Mining Claims (6)	100%/pending	10/15/2014
	K12028	2,491			10/15/2014
	K12029	2,345			10/15/2014
	K12030	2,318			10/15/2014
	K12033	718			10/15/2014
	K12034	1,813			10/15/2014
Bath	5152	2,427.5	Federal Mining Lease (1)	100%/in good standing	3/10/2029
Del	K10862	2,387	Federal Mining Claims (6)	100%/Assessment work pending	9/12/2015
	K10863	2,387			9/12/2015
	K10866	2,387			9/12/2018
	K10867	2,387			9/12/2018
	K10869	2,384			9/12/2013
	K10870	2,411			9/12/2013

1.2 PERMITS, LICENSES AND AUTHORIZATIONS

Table 1.2-1 presents the current authorizations and permits that are in place for the mineral exploration activities and baseline data collection activities that are occurring on the Property and other exploration Projects held in the area.

Table 1.2-1. Current Authorizations and Permits (as of July 31, 2013)

Permit No.	Permit Name	Type	Expiry	Agency	Description
N33221	Prospector permit		2014-03-31	AANDC	
N2011F0029	Winter road Beechy Area	Class A	2013-12-13	AANDC	
N2010F0017	Winter road Bathurst Inlet to Back River	Class A	2013-09-16	AANDC	Winter Road
N2009F0015	Winter road Hackett to George	Class A	2014-02-28	AANDC	winter road connecting Hackett and George Camps
KTL304F049 - Amended	Winter road Bathurst Inlet to Goose Lake and George Lake	Level 3	2013-12-13	KIA	Winter Road
KTL304F012	Winter road Hackett to George	Level 3	2013-12-13	KIA	winter road connecting Hackett and George Camps
N2010C0016	Back River Mineral Exploration	Class A	2013-10-31	AANDC	
KTL304C017 - Amended	Goose Camp	Level 3	2013-12-13	KIA	Staking/prospecting, exploration (ground/air geophysics), drilling, bulk sampling, bulk fuel storage, camp, winter road, all-weather airstrip and connecting road
KTL204C012 - Amended	Boulder	Level 2	2013-12-13	KIA	Staking/prospecting, exploration (ground/air geophysics), geophysical survey, gridding and drilling
KTL304C018 - Amended	George Camp	Level 3	2013-12-13	KIA	Staking/prospecting, exploration (ground/air geophysics), drilling, bulk sampling, bulk fuel storage, camp, winter road
KTL204C020 - Amended	Boot	Level 2	2013-12-13	KIA	Exploration (air/ground geophysics), staking, prospecting, fly/survival camp and drilling
2BE-GEO1015	George Water	Type B	2015-06-15	NWB	Water use and waste disposal for exploration and clean-up activities
2BE-GOO1015	Goose Water	Type B	2015-03-31	NWB	Industrial water use and waste disposal, bulk sample and exploration
N2012C0003	Wishbone - Malley exploration activities on crown land	Class A	2014-02-06	AAND	Staking/prospecting, exploration (ground/air geophysics), drilling, bulk sampling, bulk fuel storage, camp, winter road
KTL312C004	Wishbone - Malley exploration activities on IOL	Level 3	2013-12-13	KIA	Staking/prospecting, exploration (ground/air geophysics), drilling, bulk sampling, bulk fuel storage, camp, winter road
2BEMLL1217	Wishbone-Malley water	Type B	2017-03-26	NWB	Water use and waste disposal for exploration and clean-up activities

Appendix V1-4

List of Consultants Contributing to the DEIS

Appendix V1-4. List of Consultants Contributing to the DEIS

Table 1. List of Consultants that Contributed to the DEIS Preparation

Contributor	Role
Sabina Gold & Silver Corp. #202 - 930 West 1st Street, Vancouver, British Columbia, V7P 3N4; Tel (604) 998-4175	
Matthew Pickard	Director, Environment and Community Relations
Max Brownhill	Manager, Environmental Approvals
Elizabeth Sherlock	Environment Manager
Jason Prno	Community Relations Advisor
Fernand Beaulac	EIS Advisor and Reviewer
Anne O'Toole	Government Engagement Advisor
April Wilson-Lange	Communications Specialist
Mike Settingington (EDI Environmental Dynamics Inc.)	Third Party Reviewer: Wildlife
Peri Mahling, B.A.Sc., M.Sc., P.Eng. (Bruceling Engineering Consultants Inc.)	Third Party Reviewer: ML/ARD and Geochemistry
Keith Ferguson	Third Party Reviewer: ML/ARD and Geochemistry
Brad Armstrong, QC (Lawson Lundell LLP)	Legal Advisor
Christine Kowbell (Lawson Lundell LLP)	Legal Advisor
Rescan Environmental Services Ltd., an ERM company Sixth Floor, 1111 West Hastings Street, Vancouver, British Columbia, V6E 2J3; Tel (604) 689-9460	
Deborah Muggli, Ph.D., M.Sc., R.P.Bio	Project Manager
Korina Houghton, B.Sc.	Project Coordinator
Derek Shaw, M.A.Sc., P.Eng.	Lead, Air Quality, Noise and Vibration, and Climate and Meteorology
Kelsey Norlund, Ph.D.	Lead, Geology and Geochemical Characterizations, ML/ARD Potential, Water Balance, and Water Quality Prediction Model
Tyler Gale, M.A.Sc.	Lead, Groundwater and Permafrost
Dan McAllister, P.Ag., M.Sc.	Lead, Terrain and Soils, and Vegetation and Special Landscape Features
Greg Sharam, Ph.D., M.Sc., B.Sc.	Lead, Terrestrial and Marine Wildlife
David Luzi, M.Sc., GIT	Lead, Surface Hydrology and Bathymetry
Michael Henry, Ph.D.	Lead, Freshwater/Marine Water Quality, Sediment Quality, Aquatic Habitat; Limnology; and Physical Processes
Kerry Marchinko, Ph.D., M.Sc.	Lead, Freshwater/Marine Fish Habitat and Community
Lisa Seip, M.A., RPCA, CAHP	Lead, Archaeology
Kent Gustavson, Ph.D., M.Sc.	Lead, Socio-economics and Land Use
Lesley Shelley, Ph.D.	Lead, Country Foods and Human Health/Environmental Risk Assessment
Stephen Jollymore, B.A. ADP GIS	Lead, GIS Services
Kris Etches, B.A.	Lead, Publishing

(continued)

Table 1. List of Consultants that Contributed to the DEIS Preparation (completed)

Contributor	Role
Kitikmeot Inuit Association (KIA) <i>P.O. Box 360, Kugluktuk, Nunavut, X0B 0B0; Tel (867) 982-3310</i>	
Luigi Torretti	Traditional Knowledge Project Manager
Vivian Banci, M.Sc., R.P.Bio.	Traditional Knowledge Contributing Author
Rose Spicker, ADP(GIS), CGS, B.Sc.	Traditional Knowledge Contributing Author
Knight Piésold Ltd. <i>1650 Main Street West, North Bay, ON, P1B 8G5; Tel (705) 476-2165</i>	
Richard Cook, B.Sc.	Select Management Plans
Knight Piésold Ltd. <i>#1400 - 750 West Pender Street, Vancouver, British Columbia, V6C 2T8; Tel (604) 685-0543</i>	
Jesse Collison, B.Eng. (Civil), EIT	Project Manager
EBA, A Tetra Tech Company, Mining Group <i>Oceanic Plaza, 9th Floor, 1066 West Hastings Street, Vancouver, BC V6E 3X2; Tel (604) 685-0275</i>	
Graham Wilkins	Project Manager
Rick Hoos, M.Sc., R.P.Bio.	Select Management Plans
Tetra Tech Wardrop, Mining & Minerals <i>#800 - 555 West Hastings Street, Vancouver, British Columbia V6B 1M1; Tel (604) 408-3788</i>	
Steve Ip, CMA, M.Eng (Mining)	Project Manager
AMC Consultants <i>#202 -200 Granville Street, Vancouver, British Columbia, V6C 1S4; Tel (604) 669-0044</i>	
George Zazzi, P.Eng.	Project Manager
Navenco Marine Inc. <i>350 boul. Ford, Suite 130, Chateauguay, Quebec, J6J 4Z2L; Tel (450) 698-2810</i>	
Todd Mitchell	Select Management Plans

Table 2. List of Organizations Consulted and Engaged during the DEIS Preparation (as of November 25, 2013)

Organization	Contact Information
Aboriginal Affairs and Northern Development - Headquarters	15 Eddy Street 10th floor Gatineau, QC K1A 0H4
Aboriginal Affairs and Northern Development - Nunavut Region	969 Qimugjuk Building 2 nd Floor PO Box 2200 Iqaluit, NU X0A 0H0
Bathurst Inlet Hunters and Trappers Organization	PO Box 1270 Cambridge Bay, NU X0B 0C0
Bathurst Inlet Lodge	PO Box 820 Yellowknife, NWT X1A 2N6
Bay Chimo Hunters and Trappers Organization	PO Box 1270 Cambridge Bay, NU X0B 0C0
Cambridge Bay Hunters and Trappers Organization	PO Box 1270 Cambridge Bay, NU X0B 0C0

(continued)

Table 2. List of Organizations Consulted and Engaged during the DEIS Preparation (as of November 25, 2013) (continued)

Organization	Contact Information
Canadian Northern Development Agency - Headquarters	400 Cooper Street 5 th Floor Ottawa, ON K1A 0H3
Deninu Kue First Nation	Box 279 Fort Resolution, NT X0E 0M0
Environment Canada - Eastern Arctic	969 Qimugjuk Building PO Box 2200 Iqaluit, NU X0A 0H0
Environment Canada - Headquarters	351, boul. Saint-Joseph Gatineau, QC K1A 0H3
Environment Canada - Northern	5019 - 52 nd Street PO Box 2310 Yellowknife, NWT X1A 2P7
Environment Canada - Regional Headquarters	4999 - 98 Avenue NW Edmonton, AB T6B 2X3
Fisheries and Oceans - Eastern Arctic	#200 - 626 Tumiit Plaza PO Box 358
Fisheries and Oceans - Regional Office	501 University Crescent Winnipeg, MB R3T 2N6
Fisheries and Oceans - Western Arctic	5204 - 50 th Avenue Yellowknife, NWT X1A 0E6
Fisheries and Oceans - Headquarters	200 Kent Street Ottawa, ON K1A 0E6
Gjoa Haven Hunters and Trappers Organization	PO Box 162 Gjoa Haven, NU X0B 1J0
Government of Nunavut	Building 1104 A, Inuksugait Plaza PO Box 1000 Station 1500 Iqaluit NU X0A 0H0
Hamlet of Cambridge Bay	PO Box 16 Cambridge Bay, NU X0B 0C0
Hamlet of Gjoa Haven	PO Box 200 Gjoa Haven, NU X0B 1J0
Hamlet of Kugaaruk	PO Box 205 Kugaaruk, NU X0B 0E0

(continued)

Table 2. List of Organizations Consulted and Engaged during the DEIS Preparation (as of November 25, 2013) (continued)

Organization	Contact Information
Hamlet of Kugluktuk	PO Box 271 Kugluktuk, NU X0B 0E0
Hamlet of Taloyoak	PO Box 8 Taloyoak, NU X0B 1B0
Kiilinik High School	PO Box 23 Cambridge Bay, NU X0B 0C0
Kitikmeot Heritage Society	PO Box 2160 Cambridge Bay, NU X0B 0C0
Kitikmeot Inuit Association	PO Box 18 Cambridge Bay, NU X0B 0C0
Kugaaruk High School	Kugaaruk, NU X0B 1K0
Kugluktuk Community Advisory Group	4 Omingmak Street Box 2239 Cambridge Bay, NU X0B 0C0
Kugluktuk High School	PO Box 273 Kugluktuk, NU X0B 0E0
Kugluktuk Hunters and Trappers Organization	PO Box 309 Kugluktuk, NU X0B 0E0
Netsilik School	Box 9 Taloyoak, NU X0B 1B0
Natural Resources Canada	580 Booth Street 10 th Floor, Room D9-1 Ottawa, ON K1A 0E4
North Slave Métis Alliance	Box 2301 Yellowknife, NT X1A 2P7
Northern Project Management Office - Iqaluit	Allavvik Building Inuksugait Plaza IV Box 40 Iqaluit, NU X0A 0H0
Northern Project Management Office - Yellowknife	Nova Plaza, 3 rd Floor 5019 - 52 nd Street PO Box 1500 Yellowknife, NWT X1A 2R3

(continued)

Table 2. List of Organizations Consulted and Engaged during the DEIS Preparation (as of November 25, 2013) (completed)

Organization	Contact Information
Nunavut Tunngavik Inc.	PO Box 638 Iqaluit, NU X0A 0H0
Qiqirtaq High School	Gjoa Haven, NU N0B 1J0
Taloyoak Hunters and Trappers Organization	PO Box 20 Taloyoak, NU X0B 1B0
Tlicho Government	Box 412 Behchoko, NT X0E 0Y0
Transport Canada - Headquarters	330 Sparks Street Ottawa, ON K1A 0N5
Transport Canada - Regional Offices	344 Edmonton Street Winnipeg, MB R3B 2L4
Transport Canada - Regional Offices	1100 - 9700 Jasper Avenue NW Edmonton, AB T5J 4E6
Yellowknives Dene First Nation	PO Box 2514 Yellowknife, NWT X1A 2P8
<i>Planned Consultation and Engagement in November 2013</i>	
Kugaaruk Hunters and Trappers Organization	
Lutsel K'e Dene First Nation	

Appendix V1-5

List of Agencies, Organizations, and Persons for DEIS
Distribution

Appendix V1-5. List of Agencies, Organizations, and Persons for DEIS Distribution¹

Group	Printed Copies (Full DEIS)	Printed Copies (Main Volume Only)	Electronic Copies ²
Nunavut Impact Review Board Technical Services Department PO Box 1360 Cambridge Bay, NU Canada X0B 0C0	4	9	
Nunavut Water Board Attn: David Hohnstein, Director Technical Services Edmonton, AB Phone: 780-443-4406	1		1
Nunavut Water Board PO Box 119 Gjoa Haven, NU Canada X0B 1J0 Phone: 867-360-6338	1		2
Kitikmeot Inuit Association - Kugluktuk PO Box 360 Kugluktuk, NU Canada X0B 0E0	1		2
Kitikmeot Inuit Association - Cambridge Bay PO Box 18 Cambridge Bay, NU Canada X0B 0C0	1		
Kitikmeot Inuit Association - Gjoa Haven PO Box 199 Gjoa Haven, NU Canada X0B 1J0	1		
Kitikmeot Inuit Association - Taloyoak PO Box 206 Taloyoak, NU Canada X0B 1B0	1		
Kitikmeot Inuit Association - Kugaaruk PO Box 218 Kugaaruk, NU Canada X0B 1K0	1		
McLennan Ross LLP Attn: John Donihee, Partner 1000 First Canadian Centre, 350 - 7th Avenue SW Calgary, AB Canada T2P 3N9	1		
Government of Nunavut Department of Economic Development and Transportation Attn: Agnes Simonfalvy PO Box 41000, Station 1560 (Inuksugait Plaza, Phase 1 - if sent by courier) Iqaluit, NU Canada X0A 0H0	3		10
Environment Canada Canadian Wildlife Service Attn: Paula Smith PO Box 1870, Building 969 Iqaluit, NU Canada X0A 0H0			1
Environment Canada Canadian Wildlife Service EPOD EA North Iqaluit Office Attn: Loretta Ransom PO Box 1870, Building 969 Iqaluit, NU Canada X0A 0H0	1		1

¹ Distribution list was provided by NIRB.

² Electronic copies may be obtained by contacting Sabina directly at backriverproject@sabinagoldsilver.com.

Appendix V1-5. List of Agencies, Organizations, and Persons for DEIS Distribution¹

Group	Printed Copies (Full DEIS)	Printed Copies (Main Volume Only)	Electronic Copies ²
Transport Canada Regional Headquarters Winnipeg Attn: Meighan Andrews 3rd Floor - 344 Edmonton Street Winnipeg, MB Canada R3C 0P6			6
Aboriginal Affairs and Northern Development Canada Attn: Erika Marteleira PO Box 100, Building 918 Iqaluit, NU Canada X0A 0H0	1		3
Parks Canada Natural Resource Conservation Branch Attn: Allison Stoddart 4th Floor - 25 Eddy Street Gatineau, QC Canada K1A 0M5	1		3
Natural Resources Canada Attn: Kathleen Cavallero 11th Floor - 580 Booth Street, Room B7-1 Ottawa, ON Canada K1A 0E4	2		4
Government of the Northwest Territories Department of Environment and Natural Resources, Environmental Assessment and Monitoring Section Attn: Kate Witherly PO Box 1320 Yellowknife, NT Canada X1A 2L9			2
Yellowknives Dene First Nations Attn: Todd Stack PO Box 2514 Yellowknife, NT Canada X1A 2P8	1		
Fisheries and Oceans Canada Attn: Georgina Wilson 301-5204 50th Avenue Yellowknife, NT Canada X1A 1E2	1		2

¹ Distribution list was provided by NIRB.² Electronic copies may be obtained by contacting Sabina directly at backriverproject@sabinagoldsilver.com.

Appendix V1-6

Commitments Table

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Main Volume - Chapter 10		
Environmental Policy	C1-1	<p>Sabina Gold & Silver Corp. takes its responsibility to act as a steward of the environment seriously. To fulfill this responsibility, Sabina strives to:</p> <ul style="list-style-type: none"> • Ensure that we design our activities and operate in compliance with all environmental regulations to minimize our impact on the environment. • Promote responsibility and accountability of managers, employees and contractors to protect the environment and make environmental performance an essential part of the management/contractor review process. • Provide resources, personnel and training to enable management, employees and contractors to implement programs and policies to protect the environment. • Communicate openly with employees, contractors, local stakeholders and government on our environmental protection and sustainability programs and performance. We will also address any concerns pertaining to potential hazards and impacts. • Promote the development and implementation of systems and technologies to reduce environmental risks. • Establish and maintain appropriate emergency response plans for all activities and facilities. • Maintain a self-monitoring program at each facility to ensure compliance and to proactively address plans to correct potential deficiencies. • Work cooperatively with government agencies, local communities and contractors to develop and enhance systems and technologies to improve environmental and sustainability practices. • Encourage all employees, contractors or stakeholders to report to management any known or suspected departures from this policy or its related procedures.
Volume 2 - Project Description and Alternatives		
1.6 Project Overview	C2-1	Tailings from the mill will be stored in a single Tailings Impoundment Area (TIA) in the area of the mill.
2.1 Project Design Considerations 2.1.1 Biophysical Environment (operational safeguards)	C2-2	<p>Sabina commits to the following design considerations:</p> <ul style="list-style-type: none"> • Minimize project footprint, thus minimizing the loss of habitat and reduction of habitat effectiveness. • Contain the Project mining activities within the Goose and George watersheds. • To the extent possible, avoid known archaeological sites and prioritize avoidance of important (unique and/or old) sites. • Maintain a 31 meter buffer from streams and waterways. • Maintain a buffer zone from important wildlife dens and bird nesting areas. • Maximize sourcing of aggregate and borrow materials from open pits. • Select water sources in which Project water withdrawals will minimize the potential for drawdown and effects to fish habitat and the aquatic environment.
2.1 Project Design Considerations 2.1.3 Ecosystem Integrity	C2-3	The main mitigation measure that will be employed for the permanent alteration or destruction of fish habitat (PAD) will be avoidance.
	C2-4	A range of specific and generally accepted techniques for sediment control, riparian care, site isolation, timing/sequencing, reclamation and rehabilitation will be used to avoid a HADD, prevent the introduction of deleterious substances to watercourses, and to minimize adverse effects of disturbances to fish habitat.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 2 - Project Description and Alternatives (cont'd)		
2.1 Project Design Considerations 2.1.4 Application of the Precautionary Approach	C2-5	The precautionary approach will be integrated into decision making on all aspects of implementation. Where there is uncertainty or some plausible risk, conservative approaches, together with a dynamic process of adaptive management will be implemented.
2.1 Project Design Considerations 2.1.9 Consideration of Current Land Use Activities	C2-6	Sabina is committed to open communication with its industry neighbours and where possible to implement joint programs and share information.
4.2 Tier One Alternatives 4.3.2 Infrastructure 4.3.3.3 Site Water Treatment	C2-7	Cyanide will only be used at the Goose Property to recover gold and the processing plant will incorporate cyanide detoxification prior to release to the Tailings Impoundment Area.
6.3 Access to Project Sites 6.3.3 Marine Access and Shipping Route	C2-8	Sabina will work with local and territorial governments to minimize interference with each other's deliveries and if possible, coordinate joint resupply efforts.
6.4 Site Preparation and Construction of the Marine Laydown Area 6.4.10 Marine Laydown Area Security	C2-9	Sabina will develop a Marine Security Plan in accordance with the requirements of the <i>Marine Transportation Security Act</i> .
6.4 Site Preparation and Construction 6.4.6 Fuel	C2-10	Fuel storage areas and vehicles will be equipped with spill kits for emergency response. Sabina will commit to a Spill Contingency Plan that identifies spill kit locations and appropriate response measures for spills.
6.5 Ground Transportation and Associated Water Crossings - Winter Road Corridors 6.5.3 Design and Construction of the Winter Road	C2-11	Sabina will provide emergency services and shelters along winter road networks. Goose and George Camps will also serve as emergency shelters.
6.6.13 Construction of Tailings Impoundment Area	C2-12	Specific design allowances will be made for and consideration will be given to permafrost, slopes, seismic activity, and site drainage requirements, particularly during peak flow conditions.
6.6.13.2 Design Basis and Operating Criteria	C2-13	The operational supernatant pond volume will be managed by selective tailings deposition to ensure that the beaches are saturated, thus reducing the potential for dust generation
6.6.13 Construction of Tailings Impoundment Area 6.6.13.4 General Description of TIA Layout	C2-14	The TIA will be lined to control and reduce seepage from the facility.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 2 - Project Description and Alternatives (<i>cont'd</i>)		
7.2 Mining 7.2.7 Waste Rock Storage Areas 7.2.7.2 Waste Rock Disposal	C2-15	Acid generation from PAG waste rock will be prevented by incorporating the PAG waste rock into the permafrost using convective cooling techniques.
7.6 Explosives and Ammonium Nitrate Storage during Operation	C2-16	Sabina will commit to the measures defined in the Explosives Management Plan and all handling, transport, storage, manufacture, and use of explosives will be subject to federal approval under the Explosives Act and the Nunavut Mine Health and Safety Act.
7.8 Milling Process Description 7.8.7 Reagents	C2-17	Reagent storage tanks will be equipped with level indicators and instrumentation to ensure that spills do not occur during operation.
	C2-18	Cyanide monitoring/alarm systems will be installed at the cyanide preparation and leaching areas. Emergency medical stations and emergency cyanide detoxification chemicals will be provided at the areas
	C2-19	SO ₂ gas alarms/monitors will also be provided to monitor SO ₂ concentration in the CN destruction area.
8.0 Reclamation and Closure 8.2 Regulatory Framework Regarding Mine Closure	C2-20	Reclamation and closure of the mine will be carried out in accordance with a Final Mine Closure and Reclamation Plan (MCRP) to be approved under Sabina's future Type A Water License to be issued by the Nunavut Water Board.
8.0 Reclamation and Closure 8.1 Overview and Schedule	C2-21	WRSAs and the TIA will be covered with nPAG to promote the aggregation of permafrost to encapsulate PAG materials.
	C2-22	Open pits will be actively filled with lake water to reduce the generation of acid and the leaching of metals.
8.0 Reclamation and Closure 8.3 Closure Objectives	C2-23	Mine components that will remain after mine closure will be constructed or modified at closure to be physically stable so as to not erode, subside, or move from its intended location under extreme natural events or disruptive forces to which it may be subjected after closure.
9. Environmental Management	C2-24	Sabina commits to following the mitigation measures defined in the Borrow Pits and Quarry Management Plan
	C2-25	Sabina is committed to preventing, to the greatest extent possible, both inadvertent release of hazardous substances to the environment and accidents resulting from mishandling or mishap. Sabina commits to a Hazardous Materials Management Plan.
	C2-26	Non-hazardous waste management will be governed by the procedures outlined in Sabina's Landfill and Waste Management Plan.
	C2-27	Sabina commits to following the procedures and legal requirements outlined in the Fuel Management Plan.
	C2-28	The oil handling facility will be constructed and operated in accordance with the Oil Pollution Emergency Plan (OPEP) that was developed to specifically assist in implementing measures to protect the marine environment and minimize impacts from potential spill events.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 3: Chapter 1 - Public Consultation and Engagement		
1.7 Community Involvement Plan Overview	C3-1	Sabina is committed to working closely with Kitikmeot residents, communities and other stakeholders to help ensure the Project is built in a manner consistent with regional needs and aspirations. Communities will be consulted throughout the lifetime of the Project. Sabina will ensure the provision of timely Project updates, responses to feedback provided, and information on upcoming employment and training opportunities. Inuinnaqtun and Inuktitut interpretation / translation will be provided throughout the consultation process to enable participation of all community members.
1.1 Regulations and Requirements Pertaining to Public Consultation and Engagement for the Project 1.2.3 Corporate Commitments	C3-2	Sabina is committed to following mining industry best practices in its public consultation and engagement activities, including that found in the Prospectors and Developers Association of Canada's (2013) <i>E3Plus Framework for Responsible Exploration</i> . More particularly, the Company is committed to following the Prospectors and Developers Association of Canada's (PDAC 2013) basic principles for successful community engagement: <ul style="list-style-type: none"> • <i>Respect</i> - Ensure respect for all parties in the process; • <i>Honesty</i> - Ensure full, true and plain disclosure of information; • <i>Inclusion</i> - Ensure the process is inclusive, so that all parties who should be present are indeed present; • <i>Transparency</i> - Establish and maintain complete transparency in all aspects of the process; and • <i>Communication</i> - Listen to the community and talk with its members.
1.3 Consultation and Engagement with Aboriginal Organizations 1.3.1 Inuit Organizations	C3-3	Sabina has and will continue to engage with the two primary Inuit organizations with rights and responsibilities in the Project area, the Kitikmeot Inuit Association (KIA) and Nunavut Tunngavik Incorporated (NTI).
1.3 Consultation and Engagement with Aboriginal Organizations 1.3.2 Northwest Territories Aboriginal Organizations	C3-4	A number of Northwest Territories Aboriginal organizations have been (or will be) engaged for the Project, including the Akaitcho Dene First Nations, the Tlicho Government, and North Slave Métis Alliance. Sabina will continue to engage these organizations throughout the Project's development, as necessary.
1.4 Consultation and Engagement with Potentially Affected Communities 1.4.1.1 Category 1 Communities	C3-5	Residents of Category 1 communities (i.e. Cambridge Bay, Kugluktuk, Bathurst Inlet, and Bay Chimo) will be given employment and contracting opportunity preference for the Project as will other residents of the Kitikmeot region
	C3-6	Cambridge Bay and Kugluktuk will serve as points-of-hire
1.4 Consultation and Engagement with Potentially Affected Communities 1.4.1.2 Category 2 Communities	C3-7	Category 2 communities (i.e. Gjoa Haven, Taloyoak, and Kugaaruk) may become points of hire in the future if employment numbers are sufficient although all residents will be given preference for employment and contracting opportunities with the Project.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 3: Chapter 1 - Public Consultation and Engagement (<i>cont'd</i>)		
<p>1.6 Results of the Public Consultation and Engagement Program</p> <p>1.6.3 Key Issues Identified through Public Consultation and Engagement and Sabina's Commitments to Addressing these Issues</p> <p>Table 1.6-1 Summary of Key Issues Raised During Public Consultation and Sabina's Commitments to Addressing those Issues</p>	C3-8	A facility for storing and preparing country food will be provided at the Project's three main camps.
	C3-9	Sabina has committed to providing various opportunities to the Kitikmeot Region including preferential employment, contracting, and training for local Inuit, continued implementation of a Kitikmeot-focused donations policy, and the paying of all applicable taxes and royalties to governing bodies. An IIBA to be negotiated with the KIA will further outline Sabina's benefits-oriented commitments.
	C3-10	One annual scholarship will be established for Kitikmeot Region Inuit who are enrolled in a post-secondary educational program, with preference given to those in environmental or mining-related fields.
	C3-11	Sabina is committed to regularly communicating the results of its environmental management and monitoring programs to local communities. This will include annual visits to communities and with stakeholder groups, the preparation of annual reports, and other forms of outreach.
	C3-12	Sabina is committed to supporting apprenticeship and pre-employment training opportunities, and supporting ongoing educational and skills development training opportunities for its employees. Pre-employment orientation and financial management courses will also be offered to new employees, should they be desired.
	C3-13	An Employee Assistance Program (EAP) will be made available to every Sabina employee and their immediate families.
	C3-14	All employees will have access to Human Resources personnel to whom they can speak in confidence, using Inuinnaqtun and Inuktitut if they wish.
	C3-15	Every Sabina employee will be required to undergo intercultural awareness training.
	C3-16	Management and monitoring commitments specific to fish and water quality are found in the Aquatic Effects Monitoring and Management Plan, Site Water Monitoring and Management Plan, and No Net Loss Plan, but include regular monitoring and reporting of fish health and water quality, and fish habitat compensation measures.
	C3-17	Sabina will utilize progressive reclamation practices throughout the life of the Project to help ensure that mine closure is conducted responsibly and efficiently. Sabina has developed a Final Closure Plan that will be followed, and sufficient reclamation bonding has been set aside with both the KIA and Government of Canada.
Volume 3: Chapter 2 - Government Engagement		
<p>2.1 Introduction</p> <p>2.1.4 Alignment of Government Engagement with Corporate Commitments</p>	C3-18	<p>Sabina's Environmental Policy supports the Company's approach to effective engagement of government agencies. Among other items mentioned in this policy, Sabina has committed to:</p> <ul style="list-style-type: none"> • Communicate openly with employees, contractors, local stakeholders and government on our environmental protection and sustainability programs and performance and address concerns pertaining to potential hazards and impacts. • Work cooperatively with government agencies, local communities and contractors to develop and enhance systems and technologies to improve environmental and sustainability practices.
<p>2.3 Federal and Territorial Agency Engagement Program</p> <p>2.3.2 Government Engagement Methods</p>	C3-19	Sabina recognizes there will be an on-going need for both formal and informal government engagement activities.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 3: Chapter 3 - Traditional Knowledge		
3.1 Introduction 3.1.1 Conformity with EIS Guidelines and Use of Traditional Knowledge in the DEIS / Table 3.1-1 Uses of Traditional Knowledge in Sabina's Draft Environmental Impact Statement for the Back River Project	C3-20	Traditional Knowledge (TK) has been directly and indirectly incorporated into a number of mitigation and management commitments proposed in the DEIS for the Back River Project. Volume 10 (Management Plans) and other relevant DEIS volumes should be referred to for further information. Uses of TK in Sabina's DEIS are also highlighted in Table 3.1-1.
	C3-21	Natural variability was documented as part of the baseline studies and the NTKP report; this variability will be incorporated into future monitoring programs. If a valued potable water source is identified in the Project area, specific management measures would be undertaken to protect the water source.
	C3-22	Mitigation of archaeological sites will be determined through consultation with the Nunavut Department of Culture and Heritage and the Inuit Heritage Trust; TK may be used to help determine the mitigation requirement on a site by site basis.
Volume 4 - Atmospheric Environment		
Specifically in Volume 10 Management Plans Chapter 17 Air Quality Monitoring and Management Plan Chapter 18 Noise Abatement Plan	C4-1	General mitigation and management measures will be followed as outlined in the Air Quality Monitoring and Management Plan and Noise Abatement Plan.
	C4-2	The operation of incinerators will comply with Nunavut standards, Canada-Wide Standards for Dioxins and Furans and Canada-Wide Standards for Mercury emissions.
1 Air Quality 1.5 Potential Project-related Effects Assessment 1.5.3 Identification of Mitigation and Management Measures 1.8 Mitigation and Adaptive Management 1.8.1.2 Best Management Practices 3 Climate and Meteorology 3.4 Supporting and Supplementary Information 3.4.3 Mitigation and Monitoring 3.4.3.2 Best Management Practices	C4-3	Proper equipment maintenance will take place.
	C4-4	Vehicle and equipment idling will be minimized.
	C4-5	Vehicles will be driven at designated speeds on site roads.
	C4-6	Windbreaks or fences around known problem areas or stockpiles will be erected to limit the dispersion of dust emissions from equipment and stockpiles, or activities likely to generate dust.
1 Air Quality 1.8 Mitigation and Adaptive Management 1.8.1.2 Best Management Practices 3 Climate and Meteorology 3.4 Supporting and Supplementary Information 3.4.3 Mitigation and Monitoring 3.4.3.2 Best Management Practices	C4-7	Equipment with low emissions that meet latest applicable Canada emissions standards and guidelines will be selected.
	C4-8	Operation of incinerators will include the implementation of a waste segregation program (i.e., materials that are unsuitable for incineration, e.g., chlorinated plastics, will be diverted to alternate waste disposal facilities)

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 4 - Atmospheric Environment (cont'd)		
2 Noise and Vibration 2.5 Potential Project-related Effects Assessment 2.5.3 Identification of Mitigation and Management Measures 2.8 Mitigation and Adaptive Management 2.8.2 Best Management Practices 2 Noise and Vibration 2.8 Mitigation and Adaptive Management 2.8.4 Monitoring	C4-9	Meteorological monitoring will be carried out (temperature, wind speed, wind direction, relative humidity, solar radiation and rainfall).
	C4-10	Scheduled take-off and landing of aircraft will be limited to certain times of the day.
	C4-11	The following noise monitoring will be carried out: <ul style="list-style-type: none"> • dBA during an eight hour period; and • dBC during impact events.
Volume 5 - Terrestrial Environment		
3 Landforms and Soils 3.4.1.3 Implications to the Project Design Related to Terrain Conditions, in Particular Permafrost, Sensitive Landforms, High Ice-content Soils, Ice Lenses, Thaw-sensitive Slopes, and Talik Zones	C5-1	Minimize the area of impact on local landforms and soils, especially in areas where local terrain conditions indicate existence of sensitive surficial deposits, permafrost, or high ice content soils.
4 Vegetation and Special Landscape Features 4.5.3.1 Mitigation for Loss of Vegetation and Special Landscape Features; and	C5-2	Clearing of vegetation and soil from unique landscape features will be minimized to the extent possible.
4 Vegetation and Special Landscape Features 4.5.3.2 Mitigation for Degradation of Vegetation	C5-3	All vehicles and machinery will restrict travel to designated road surfaces.
	C5-4	Storage areas will be kept in a condition that does not give rise to visible dust emissions.
	C5-5	Regular wheel-cleaning of vehicles travelling around and leaving the site.
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors	C5-6	General Wildlife Mitigation Measures and Best Management Practices will be followed as detailed in the Wildlife Mitigation and Monitoring Plan.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 5 - Terrestrial Environment (cont'd)		
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors x.8.3 Adaptive Management	C5-7	The need for corrective actions to on-site management or installation of additional control measures will be determined on a case-by-case basis. Indications of the need for corrective actions and additional control measures may include: <ul style="list-style-type: none"> • if results from the Site Water Monitoring and Management Plan show non-compliance related to tundra discharges; or • if results from the Wildlife Mitigation and Monitoring Program, which will monitor select wildlife species and habitat around the mine infrastructure and activities, show adverse effects to wildlife or wildlife habitat.
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors x.5.3.1 Mitigation for Habitat Loss	C5-8	Construction of Project infrastructure will avoid, where possible, wildlife sensitive areas such as critical habitat for caribou calving and high quality habitat for foraging during post-calving, important cliff habitat for raptor nesting, eskers and denning habitat, and important waterbird staging areas.
5 Caribou 5.5.3.2 Mitigation for Disturbance	C5-9	If it is not possible to avoid sensitive areas during construction, then pre-construction surveys will be conducted for the target wildlife species. For Caribou, locations and distribution relative to the Project will be monitored.
	C5-10	During Construction and Operation, works will be managed (and may be halted) during sensitive periods for caribou when groups of caribou are within a prescribed distance from the activity.
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors x.5.3.2 Mitigation for Disturbance	C5-11	Construction and Operational activities will be scheduled, where possible, to avoid disturbance of wildlife during sensitive periods, particularly for caribou.
10 Raptors 10.5.3.2 Mitigation for Disturbance 10.9.1.1 Facility Specific-Monitoring	C5-12	During the Operational phase, if a raptor nest site is located within the Project footprint such as within an open pit or quarry site, then mitigation activities will be employed to remove or monitor the nest based on the progress of nest building and egg laying.
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors x.5.3.6 Mitigation for Exposure to Contaminants x.9.1.1 Facilities-specific Monitoring x.8.3 Adaptive Management	C5-13	During the Operational and Closure phases, facilities monitoring will be conducted to examine if wildlife are interacting with the Project infrastructure or are present in the TIA. If wildlife are observed using the Project infrastructure, then species-appropriate actions will be taken to exclude wildlife, which may include skirting, excluding waterfowl from the TIA, fencing or enclosing waste-management facilities and excluding wildlife from the runway.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 5 - Terrestrial Environment (cont'd)		
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors X.5.3.6 Mitigation for Exposure to Contaminants	C5-14	Employ wildlife exclusion measures if wildlife are observed to be using contaminated water or hazardous liquids.
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors x.5.3.6 Mitigation for Attraction x.8.5 Summary Table	C5-15	Mitigation and monitoring to minimize potential wildlife attractants on site through industry-standard waste management procedures defined in the Landfill and Waste Management Plan.
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors x.5.3.1 Mitigation for Habitat Loss; and x.5.3.2 Mitigation for Disturbance	C5-16	To reduce disturbance in wildlife sensitive areas along road routes, the roads and quarries will be designed to avoid, by suitable buffers, sensitive wildlife features, such as den sites, raptor nests and eskers as much as possible.
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers x.5.3.4 Mitigation for Direct Mortality and Injury	C5-17	Sabina is committed to specific measures during and outside of sensitive periods and based on the size of caribou groups. All wildlife encounters, mitigation activities, and accidents with a road will be reported and follow up mitigation may be enacted if locations with higher probabilities of occurrences are located.
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors x.5.3.2 Mitigation for Disturbance x.8.5 Summary Table for Mitigation	C5-18	To reduce disturbance to wildlife from aircraft, aircraft elevation and distance from wildlife sensitive areas (e.g. nests, dens and crossings) will be managed through a pilot education and reporting system.
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors x.5.3.6 Mitigation for Attraction X.8.5 Summary Table of Mitigation	C5-19	Management strategies to minimize human-wildlife interactions will include a policy of no feeding and no intentional attraction of wildlife.
	C5-20	A policy of no littering to commence at the start of construction and to continue throughout the life of the Project to limit littering and potential attraction of wildlife to the Project.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 5 - Terrestrial Environment (cont'd)		
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors x.5.3.5 Mitigation for Indirect Mortality x.8.5 Summary Table of Mitigation	C5-21	A policy prohibiting hunting and trapping by all Project and contractor employees throughout the life of the Project and will include reporting.
6 Grizzly Bear, 8 Wolverine and Furbearers x.5.3.6 Mitigation for Attraction x.8.5 Summary Table of Mitigation	C5-22	Implement a Protocol for Human-Wildlife Interaction to outline the measures taken to address problem wildlife, particularly bears, interacting with the Project.
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors	C5-23	All contractors and employees working on the Project will participate in the Employee Wildlife Education program in conjunction with Project orientation. Mandatory annual refresher courses will ensure ongoing employee awareness of wildlife concerns and mitigation procedures for the Project. This program will be supported by standard operating procedures, reporting forms, information sheets, and awareness posters and signage.
5 Caribou, 6 Grizzly Bear, 7 Muskox, 8 Wolverine and Furbearers, 9 Migratory Birds, 10 Raptors x.5.3.4 Mitigation for Direct Mortality; and/or X.8.5 Summary Table of Mitigation X.9 Proposed Monitoring Programs	C5-24	A Wildlife Effects Monitoring Program (WEMP) will be developed to evaluate 1) the regional populations of VEC species, and 2) mechanisms by which wildlife may interact with the Project (i.e., the effectiveness of mitigation and management in reducing potential effects of the Project on identified wildlife VECs). A draft WEMP (Volume 10, Chapter 20) has been developed and will be enacted following approval from regulators. The WEMP will be updated as needed following changes to current standards as defined by community, scientific, or regulatory bodies.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 6 - Freshwater Environment		
4 Freshwater Water Quality 4.5 Potential Project-Related Effects 4.5.3 Identification of Mitigation and Management Measures 4.5.3.5 Water Use 4.8 Mitigation and Adaptive Management Table x.8-1 Mitigation and Adaptive Management	C6-1	Water withdrawal rates will be controlled to avoid adverse effects on the water source waterbody.
	C6-2	Water withdrawals for winter roads will be limited to 10% of the total under-ice volume. Winter and site road construction and maintenance will follow the DFO Nunavut Operational Statement for Ice Bridges and Snow Fills (DFO 2007a), for Clear Span Bridges (DFO 2007b), Culvert Maintenance (DFO 2007c), and Temporary Stream Crossings (DFO 2007d).
	C6-3	Quarries and borrow pits will have water collection and control infrastructure. If the runoff is turbid but chemically unaltered, it will be allowed to infiltrate into the ground.
	C6-4	Machinery will be routinely inspected for leaks and refuelling will occur, when feasible, at a designated refuelling point with drainage capture/collection installed. In the event that refuelling occurs elsewhere, drip trays will be used under vehicles and equipment.
	C6-5	Appropriate secondary containment systems will be used for petroleum product storage tanks to prevent spills and releases to water, including the prevention of diesel release from pickups carrying tidy-tanks.
	C6-6	Bulk fuel storage areas and hazardous materials storage areas will be bermed and lined with impermeable barriers to minimize leaks and spills.
	C6-7	Oily water treatment plants at equipment maintenance facilities will be used to minimize water and surface hydrocarbon compounds.
4 Freshwater Water Quality, 5 Freshwater Sediment Quality x.5 Potential Project-Related Effects Assessment x.5.3 Identification of Mitigation and Management Measures x.8 Mitigation and Adaptive Management Table x.8-1 Mitigation and Adaptive Management Also found in Volume 7 Marine Environment 2 Marine Water Quality, 3 Marine Sediment Quality	C6-8	Treated sewage effluent will be discharged on-land at approved sites at Goose and George Properties, and at the MLA.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 6 - Freshwater Environment (cont'd)		
4 Freshwater Water Quality, 5 Freshwater Sediment Quality x.5 Potential Project-Related Effects Assessment x.5.3 Identification of Mitigation and Management Measures; x.5.4 Characterization of Residual Effects x.8 Mitigation and Adaptive Management Table x.8-1 Mitigation and Adaptive Management	C6-9	Efforts to limit runoff and the transport of material into the freshwater environment. Measures may include: <ul style="list-style-type: none"> • infrastructure and waste rock storage areas will be confined to the local watersheds where the deposits are located to limit potential effects on water quality to local drainage areas; • infrastructure will be located, whenever feasible, on competent bedrock or appropriate base material that will limit permeability and the transport of potentially lower quality water into the active layer and ultimately to the freshwater environment; • the Project infrastructure will be designed to minimize the footprint area, such as being located near the deposits; • restoration of the landscape will occur as soon as possible to minimize erosion potential; • slope texturing/grading to slow runoff and reduce effect slope lengths; • installation of synthetic permeable barriers and/or fibre rolls to reduce runoff velocities and retain sediments; and • check dams, gabions, and energy dissipation structures to reduce flow velocities in channels; • preservation of riparian zones to trap sediment and to reduce flow velocities; and • stockpiles will be located well away from watercourses.
	C6-10	Lake dewatering will be staged to seasonal flows and clean water transferred to the receiving environment will remain within 10% of base flow or water levels if possible.
	C6-11	Non-contact water will be diverted around infrastructure and directed to natural downstream drainage networks.
4 Freshwater Water Quality, 5 Freshwater Sediment Quality x.5 Potential Project-Related Effects Assessment x.5.3 Identification of Mitigation and Management Measures x.5.4 Characterization of Residual Effects x.8 Mitigation and Adaptive Management Table x.8-1 Mitigation and Adaptive Management x.9 Proposed Monitoring Programs x.9.1 Conceptual Aquatic Effects Management Plan	C6-12	Lake water transferred during dewatering operations will be monitored for turbidity and TSS, and dewatering will cease once a threshold for TSS and turbidity is reached. The threshold will be based on the MMER limit for TSS.
	C6-13	Necessary repairs and adjustments will be conducted as necessary to ensure water quality does not surpass CCME guidelines for water quality in fish-bearing receiving environments.
	C6-14	All mine contact water from runoff and inflow sources will be collected and directed to the TIA (Goose Property Area) and the WMFs (George Property Area) as soon as the water management infrastructure is completed in the Construction Phase. The plan to mitigate mine contact water includes runoff from WRSAs, ore stockpiles, and tailings stored in the TIA. The TIA has been designed as a zero discharge facility, ensuring no potentially poor-quality water will be introduced to the freshwater environment while in operation. The WMFs will discharge water that will meet MMER discharge criteria to the terrestrial environment and any discharged water will meet CCME criteria at the nearest fish-bearing receiving waterbody. If necessary during the Reclamation and Closure and Post-closure phases, water will be discharged from the TIA and WMFs but any discharge would be treated to meet CCME water quality guidelines thus ensuring no negative effects to aquatic life.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 6 - Freshwater Environment (cont'd)		
4 Freshwater Water Quality, 5 Freshwater Sediment Quality; x.5 Potential Project-Related Effects Assessment x.5.3 Identification of Mitigation and Management Measures x.8 Mitigation and Adaptive Management Table x.8-1 Mitigation and Adaptive Management x.9 Proposed Monitoring Programs x.9.1 Conceptual Aquatic Effects Management Plan Also in Volume 7 Marine Environment 2 Marine Water Quality, 3 Marine Sediment Quality	C6-15	An Aquatic Effects Monitoring Plan will be in place that outlines the Aquatic Effects Monitoring Program (AEMP) that will be carried out during all phases of the Project.
6 Freshwater Fish/Aquatic Habitat, 7 Freshwater Fish Community x.9.2 Conceptual Fish Offsetting Plan Also in Volume 7 4 Marine Fish/Aquatic Habitat, 5 Marine Fish Community	C6-16	Lost fish habitat and fish mortality will be incorporated into the Conceptual Fish Offsetting Plan.
7 Freshwater Fish Community 7.5.3.1 Project Infrastructure Footprint	C6-17	Fish removal from Llama Lake will follow DFO's General Fish-Out Protocol for Lakes and Impoundments in the Northwest Territories and Nunavut (Tyson et al. 2011).
	C6-18	Fishing by mine staff will be banned within all Project areas.
	C6-19	Water pump intakes will be screened in accordance with the DFO Freshwater Intake End of Pipe Screening Guideline (DFO 1995).
	C6-20	Where possible the Project will avoid encroaching on freshwater fish habitat by adhering to a 31 m setback of infrastructure from all water.
	C6-21	Explosive use in the vicinity of fish habitat will follow the Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters (Wright and Hopky 1998).

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 7 - Marine Environment		
2 Marine Water Quality, 3 Marine Sediment Quality x.5 Potential Project-Related Effects Assessment x.5.3 Identification of Mitigation and Management Measures x.8 Mitigation and Adaptive Management Table x.8-1 Mitigation and Adaptive Management	C7-1	Water in the collection pond (MLA) will be discharged on the tundra, and only if the water quality meets the future water license criteria
2 Marine Water Quality 2.5 Potential Project-Related Effects Assessment 2.5.3 Identification of Mitigation and Management Measures 2.8 Mitigation and Adaptive Management Table x.8-1 Mitigation and Adaptive Management	C7-2	Discharge of brine water to surface water in Bathurst Inlet will meet CCME salinity guideline for the protection of marine life and will not cause the salinity of the receiving environment to fluctuate by more than 10% of the natural expected salinity.
2 Marine Water Quality, 3 Marine Sediment Quality x.5 Potential Project-Related Effects Assessment x.5.3 Identification of Mitigation and Management Measures x.5.4 Characterization of Residual Effects x.8 Mitigation and Adaptive Management Table x.8-1 Mitigation and Adaptive Management	C7-3	Adherence to guidelines for vessel discharges and anti-fouling surface treatments, which include: <ul style="list-style-type: none"> • Organotin compounds are prohibited for vessels in Canadian waters; • Vessels must treat sewage prior to discharge, or discharge offshore; and • Vessels travelling in international water must exchange ballast water offshore.
	C7-4	Speed limits will be followed for vessel operations to minimize propeller wash and wake effects.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 7 - Marine Environment (cont'd)		
4 Marine Fish/Aquatic Habitat, 5 Marine Fish Community x.5 Potential Project-Related Effects Assessment x.5.3 Identification of Mitigation and Management Measures x.5.4 Characterization of Residual Effects x.8 Mitigation and Adaptive Management Table x.8-1 Mitigation and Adaptive Management	C7-5	Where possible the Project will avoid encroaching on marine fish habitat by adhering to a 31 m setback of infrastructure from all water
	C7-6	Working in water: <ul style="list-style-type: none"> disposal of excavated material will be in a location above the high water mark; minimize the duration of any in-water works; and minimize the disturbance of riparian vegetation.
	C7-7	Ship wakes and propeller wash will be minimized by limiting the speed at which the ships travel within the LSA
	C7-8	Shipping noise and ice scour will be minimized by limiting the speed at which the ships travel within the LSA
6 Marine Birds, 7 Ringed Seals x.5.3.1 Mitigation for Habitat Alteration x.8.5 Summary Table of Mitigation	C7-9	Project infrastructure designed to avoid, where possible, identified wildlife sensitive areas for marine wildlife, such as seabird and seaduck molting and staging areas and areas where ringed seal birth lairs are found.
6 Marine Birds 6.5.3.3 Mitigation for Direct Mortality and Injury 6.8.5 Summary Table of Mitigation	C7-10	The marine landing area will be monitored prior to take-off and landings to ensure concentrations of seabirds and seaducks are not present in the area, and to ensure safety to aircraft passengers.
6 Marine Birds 6.5.3.2 Mitigation for Disturbance 6.5.3.3 Mitigation for Direct Mortality and Injury 6.8.5 Summary Table of Mitigation	C7-11	Aircraft operation will avoid disturbing waterbird staging areas (e.g., the staging area located south of the MLA) as much as possible, via timing windows and buffers.
7 Ringed Seals 7.5.3.1 Mitigation for Habitat Alteration 7.8.5 Summary Table of Mitigation	C7-12	Construction and operation of the winter road over marine habitat outside of ringed seal pupping (mid-March through late April), nursing (mid-March through mid-June) and molting periods (mid-May through mid-July), where possible.
7 Ringed Seals 7.5.3.2 Mitigation for Disturbance 7.8.5 Summary Table for Mitigation (Vol 5. Ch.5. Caribou; 5.3.2 Valued Components)	C7-13	Open-water season shipping only (no ice-breaking) to avoid disturbance to Dolphin and Union Caribou and ringed and bearded seals during periods when caribou and seals are dependent on ice.
7 Ringed Seals 7.5.3.3 Mitigation for Mortality 7.8.5 Summary Table of Mitigation	C7-14	Pre-construction surveys conducted for ringed seals and pupping lairs prior to construction of the winter road over Bathurst Inlet.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 8 - Human Environment		
1 Archaeology 1.8 Mitigation and Adaptive Management 1.8.1 Archaeological Sites	C8-1	Mitigation for archaeological sites within 50 m of Project developments will be developed for each site in consultation with Government of Nunavut, Department of Culture and Heritage. Mitigation will include monitoring, capping, and/or systematic data recovery prior to construction.
1 Archaeology 1.8 Mitigation and Adaptive Management 1.8.2 Summary Table of Mitigation and Adaptive Management Measures	C8-2	Archaeological sites 50 m to 150 m of Project developments may be fenced, and will be inspected periodically to ensure that they are not affected by the Project. They will be marked as no work zones on Project maps.
	C8-3	Archaeological sites 150 m to 1,000 m from Project developments will be marked as no work zones on Project maps and will be periodically inspected to ensure that they are not affected by the Project.
	C8-4	A Chance Find Procedure will be in place to identify and protect unknown archaeological sites.
3 Socio-economics 3.8 Mitigation and Adaptive Management 3.8.2 Community Involvement Plan	C8-5	Community engagement, using a variety of methods (e.g., public and stakeholder meetings, community Advisory groups, social media, newsletters), will be implemented throughout the life of the Project.
	C8-6	Project updates will be provided to communities based on timely and transparent communication regarding the status of the Project and related topics.
3 Socio-economics 3.8 Mitigation and Adaptive Management 3.8.2 Community Involvement Plan (cont'd)	C8-7	Results of community research conducted for the Project on social, cultural and ecological conditions will be made publically available.
3. Socio-economics 3.5 Potential Project-related Effects Assessment 3.5.4 Identification of Mitigation and Adaptive Management 3.8 Mitigation and Adaptive Management 3.8.3 Human Resources Plan	C8-8	Information related to employment and contracting opportunities will be made accessible to local Inuit.
	C8-9	A Procurement Strategy will be implemented to facilitate regional business involvement, including providing first opportunity to regional businesses, where competitive.
	C8-10	A Labour Relations Strategy will be implemented to maximize and retain local Inuit employment. The Labour Relations Strategy details skills and entrance requirements, employee benefits, employee communication, work rotation schedules, and employee orientation programs.
	C8-11	An Employee and Family Assistance Program (EFAP) will be developed and implemented based on needs identified during community research.
	C8-12	An Inuit Employment and Training Coordinator will be hired to act as liaison for Inuit employees.
	C8-13	A Preferential Recruitment Strategy will be implemented to maximize the engagement of Kitikmeot Inuit in the Project workforce.
	C8-14	A Workforce Training Strategy will be implemented to enhance education and skill levels of the regional workforce.
	C8-15	A Workforce Transition Strategy will be implemented to enhance the ability of Project employees to transition to other employment following completion of Project activities.

Appendix V1-6. Commitments Table

Section	ID#	Commitment Description
Volume 8 - Human Environment (cont'd)		
3 Socio-economics 3.5 Potential Project-related Effects Assessment 3.5.4 Identification of Mitigation and Adaptive Management 3.8 Mitigation and Adaptive Management 3.8.1 Business Development Plan	C8-16	A Local Business and Entrepreneur Capacity Building Strategy will be implemented to maximize the number of Inuit firms engaged with the Project and enhance the capacity of those firms.
	C8-17	Funding for community initiatives will be made available and community-based contributions provided based on demand and where appropriate and feasible. Community-based investments for business development will be focused to increase the capacity of local businesses to broadly meet the demands associated with an increase in economic activity.
3 Socio-economics 3.9 Socio-economic Monitoring Program	C8-18	A Socio-economic Monitoring Program will be implemented and annual monitoring reports prepared to gauge any changes to valued components linked to the Project in the EIS.
	C8-19	Socio-economic monitoring results will be reported to NIRB and a Back River Project Socio-economic Monitoring Committee (SEMC), as well as to the Kitikmeot Region SEMC, to inform modifications of the SEMP as necessary
3 Socio-economics 3.9 Socio-economic Monitoring Program 3.8 Mitigation and Adaptive Management Table 3.8-1 Summary Table of Mitigation and Adaptive Management	C8-20	Implement an adaptive management approach by developing sound management plans with the best information available prior to project engineering and construction, monitor their implementation and adapt the plans as required.
Volume 9 - Methodology, Effects of Environment on Project, Accidents and Malfunctions		
Mitigating potential effects of the Environment on the Project	C9-1	<p>Sabina will commit to the following measures to ensure the viability and integrity of permafrost include:</p> <ul style="list-style-type: none"> • As required, insulated covers will be applied to prevent thaw and instability of permafrost in excavated areas and underlying ice-rich overburden soils; • Embankment construction will be employed (i.e. no cuts into permafrost) wherever the road passes over overburden soils to avoid disturbing sensitive overburden soils and surface vegetation; • Regular monitoring of project components (such as roads, ore stockpiles, and embankments) to ensure that physical stability is sustained; and • Ice-rich slopes will be protected with thermal and erosion barrier (e.g. rock cover). • PAG waste rock will be placed in a manner to prevent basal permafrost degradation and promote aggregation of the permafrost into the waste rock. • In order to enhance thermal protection, management of stockpile surface runoff will be facilitated through the construction of ditches and/or toe berms • Embankments or granular fill pads will be constructed with side slopes sufficient to protect underlying permafrost

REFERENCES

- DFO. 1995. *DFO Freshwater Intake End-of-Pipe Fish Screen Guidelines*. DFO/5080. Ottawa, ON: Department of Fisheries and Oceans.
- DFO. 2007a. *DFO Nunavut Operational Statement: Ice Bridges and Snow Fills*. Version 3.0, DFO/2007-1329. Ottawa, ON: Department of Fisheries and Oceans.
- DFO. 2007b. *DFO Nunavut Operational Statement: Clear Span Bridges*. Version 3.0, DFO/2007-1329. Ottawa, ON: Department of Fisheries and Oceans.
- DFO. 2007c. *DFO Nunavut Operational Statement: Culvert Maintenance*. Version 3.0, DFO/2007-1329. Ottawa, ON: Department of Fisheries and Oceans.
- DFO. 2007d. *DFO Nunavut Operational Statement: Temporary Stream Crossing*. Version 1.0. Ottawa, ON: Department of Fisheries and Oceans.
- DFO. 2009. *DFO Nunavut Operational Statement on Mineral Exploration Activities*. Version 1.0. Ottawa, ON: Department of Fisheries and Oceans.
- DFO. 2010. *DFO Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut*, Fisheries and Oceans Canada, 21 June 2010. Ottawa, ON: Department of Fisheries and Oceans.
- Tyson, J.D., W.M. Tonn, S. Boss, and B. W. Hanna. 2011. *General fish-out protocol for lakes and impoundments in the Northwest Territories and Nunavut*. Canadian Technical Report of Fisheries and Aquatic Sciences, 2935.
- Wright, D. G., and G. E. Hopky. 1998. *Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters*. Canadian Technical Report of Fisheries and Aquatic Sciences, 2107.

Appendix V1-7

DEIS Document Index

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
Volume 1 - Main Volume		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
	Plain Language Summary	Non-technical summary of the EIS in English, Inuktitut, and Inuinnaqtun
	Executive Summary	Technical summary of the EIS in English, Inuktitut, and Inuinnaqtun
	Glossary	Definition of terms used in the EIS in English, Inuktitut, and Inuinnaqtun
	Acronyms and Abbreviations	List of terminology used in the EIS
1	Introduction	Introduction to the Back River Project
2	Public Consultation and Engagement and Government Engagement	Overview of outreach and engagement with communities and organizations
3	Project Description	Summary description of the Project components
4	Traditional Knowledge	Overview of the approach to traditional knowledge, and methods used to collect and interpret it
5	Existing Environment and Baseline Information	Description of the existing biophysical and socio-economic environment
6	Potential Effects Assessment	Summary of the Project-related effects assessment
7	Mitigation and Adaptive Management	Overview of mitigation and adaptive management measures
8	Potential Cumulative Effects Assessment	Summary of the cumulative effects assessment
9	Reclamation and Closure	Summary of reclamation and closure timelines, goals, and activities
10	Monitoring and Management Plans	Summary of monitoring and management plans
11	Summary of Commitments	Summary of Project commitments
12	Conclusions	Project conclusions
Appendices	V1-1	Table of Concordance
	V1-2	List of Permits, Licences, and Authorizations Required for the Project
	V1-3	Land and Water Interests
	V1-4	List of Consultants Contributing to the DEIS
	V1-5	List of Agencies, Organizations, and Persons for DEIS Distribution
	V1-6	Commitments Table
	V1-7	DEIS Document Index
	V1-8	DEIS Complete Table of Contents

Appendix V1-7. DEIS Document Index

Chapter	Chapter Title	Contents
<i>Volume 2 - Project Description and Alternatives</i>		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
	Executive Summary	Technical summary of Volume 2 in English, Inuktitut, and Inuinnaqtun
	Preamble - Structure of Volume 2	Provides Project background and description of volume structure
	Acronyms and Abbreviations	List of terminology used in Volume 2
1	Introduction	Information on the Proponent, Project location, land tenure, and current exploration activities at the Goose and George Property Areas
2	Project Components and Activities	Overview of the Project design considerations, development phases, duration, and permitting requirements
3	Future Development	Discussion of the potential for ongoing and future development at the Goose and George Property areas
4	Alternatives	Presentation of alternatives considered for the development of the Back River Project
5	Economic and Operating Environment	Discussion of the economic operating environment as per the requirements of section 6.5 of the NIRB guidelines for the development of the EIS
6	Detailed Project Proposal Description - Site Preparation and Construction	Description of all project components and infrastructure that will be constructed at the onset of the project development and remain operational for the life of the Project
7	Detailed Project Proposal Description - Operations	Description of the operation phase of the mine sites
8	Detailed Project Proposal Description - Reclamation and Closure	Presentation of the preliminary closure plan for all Project components and sites
9	Detailed Project Proposal Description - Environmental Management	Overview of monitoring and/or mitigation plans associated with each development phase
Appendices	V2-4A	Transportation Study
	V2-4B	Metallurgical Assessment
<i>Volume 3 - Public Consultation, Government Engagement, and Traditional Knowledge</i>		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
	Executive Summary	Technical summary of Volume 3 in English, Inuktitut, and Inuinnaqtun
	Acronyms and Abbreviations	List of terminology used in Volume 3
1	Public Consultation and Engagement	Methods and results of Sabina's public consultation and engagement program

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
<i>Volume 3 - Public Consultation, Government Engagement, and Traditional Knowledge (cont'd)</i>		
2	Government Engagement	Description of Sabina's government engagement program
3	Traditional Knowledge	Description of the incorporation of traditional knowledge into the Project and a summary of Project TK studies
Appendices	V3-1A	Record of Meetings with Community and Stakeholder Groups
	V3-1B	Record of Attempted Meetings with Community and Stakeholder Groups
	V3-1C	Community and Stakeholder Group Meeting Minutes and Public Comment Forms
	V3-1D	Terms of Reference for the Cambridge Bay and Kugluktuk Community Advisory Groups
	V3-1E	Community Stakeholder Interviews for the Back River and Hackett River Projects: Participant Responses to Questions related to the Potential Development of the Projects
	V3-1F	Record of Donations
	V3-1G	Summary of Topics Raised during Public Consultation and Engagement
	V3-2A	Record of Meetings with Government Officials
	V3-3A	Inuit Traditional Knowledge of Sabina Gold & Silver Corp. Back River (Hannigayok) Project; Naonaiyaotit Traditional Knowledge Project (NTKP)
	V3-3B	Existing and Publically Available Traditional Knowledge from Aboriginal Groups in the Northwest Territories
<i>Volume 4 - Atmospheric Environment</i>		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
	Executive Summary	Technical summary of Volume 4 in English, Inuktitut, and Inuinnaqtun
	Acronyms and Abbreviations	List of terminology used in Volume 4
1	Air Quality	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
2	Noise and Vibration	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
3	Climate and Meteorology	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and additional required information for the EIS guidelines
Appendices	V4-1A	Back River Project: 2011 to 2012 Air Quality Baseline Report
	V4-1B	Back River Project: 2013 Air Quality Modelling Report
	V4-2A	Back River Project: 2012 Noise Baseline Report

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
Volume 4 - Atmospheric Environment (cont'd)		
	V4-2B	Back River Project: Noise and Vibration Modelling Report
	V4-3A	Back River Project: 2006 to 2012 Meteorological Baseline Report
	V4-3B	Climate Change Predictions - Model Variation
Volume 5 - Terrestrial Environment		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
	Executive Summary	Technical summary of Volume 5 in English, Inuktitut, and Inuinnaqtun
	Acronyms and Abbreviations	List of terminology used in Volume 5
1	Geology	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and additional required information for the EIS guidelines
2	Permafrost	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and additional required information for the EIS guidelines
3	Landform and Soils	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and additional required information for the EIS guidelines
4	Vegetation and Special Landscape Features	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
5	Caribou	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
6	Grizzly Bear	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
7	Muskox	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
8	Wolverine and Furbearers	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
9	Migratory Birds (Upland Birds and Waterfowl)	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
10	Raptors	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
Appendices	V5-2A	2010 Thermistor Data Summary (Goose Property) Memorandum Report
	V5-2B	2012 Thermistor Data Summary (Goose Property) Memorandum Report
	V5-2C	2012 to 2013 Thermistor String Records Obtained at the Hackett River Project

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
Volume 5 - Terrestrial Environment (cont'd)		
	V5-3A	Back River Project: 2012 Terrain and Soils Baseline Report
	V5-3B	Back River Project: 2013 Terrain Maps
	V5-4A	Back River Project: 2012 Ecosystems and Vegetation Baseline Report
	V5-5A	Back River Project: 2013 Habitat Suitability Baseline
	V5-5B	Back River Project: 2013 Habitat Selection by Bathurst Caribou during the Post-calving and Summer Periods
	V5-5C	Back River Project: 2012 Wildlife Baseline Report
	V5-5D	Back River Project: 2011 Wildlife Baseline Report
	V5-5E	Back River and Hackett River Projects: 2010 Caribou and Muskox Baseline Report
	V5-6A	Back River Project: 2012 Grizzly Bear and Wolverine DNA Report
Volume 6 - Freshwater Environment		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
	Executive Summary	Technical summary of Volume 6 in English, Inuktitut, and Inuinnaqtun
	Acronyms and Abbreviations	List of terminology used in Volume 6
1	Surface Hydrology	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
2	Groundwater	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and additional required information for the EIS guidelines
3	Limnology and Bathymetry	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and additional required information for the EIS guidelines
4	Freshwater Water Quality	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
5	Freshwater Sediment Quality	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
6	Freshwater Fish/Aquatic Habitat	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
7	Freshwater Fish Community	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
Appendices	V6-1A	Back River Project: 2011 Hydrology Baseline Report

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
Volume 6 - Freshwater Environment (cont'd)		
	V6-1B	Back River Project: 2012 Hydrology Baseline Report
	V6-1C	Investigating Impacts of the Proposed Development and Withdrawal at the Goose Property on Umwelt Lake Volumes and Outflows
	V6-1D	Investigating Impacts of the Proposed Development and Withdrawal at the Goose Property on Goose Lake Volumes and Outflows
	V6-1E	Investigating Impacts of the Proposed Development and Withdrawal at the Goose Property on Propeller Lake Volume and Outflows
	V6-1F	Investigating Impacts of the Proposed Development and Withdrawal at the George Property on George Lake Volume and Outflows
	V6-2A	Analytical Results of the Umwelt Westbay Groundwater Sampling Program
	V6-2B	Completion Report, Westbay System Monitoring Well: 13-GSE-319
	V6-2C	2012 Geotechnical and Hydrogeological Drilling Program Factual Data Report
	V6-2D	2013 Geomechanical and Hydrogeological Site Investigation
	V6-3A	Back River Project: 2010 Lake Water and Sediment Quality Baseline Report
	V6-3B	Back River Project: 2011 Freshwater Baseline Report
	V6-3C	Back River Project: 2012 Freshwater Baseline Report
	V6-3D	Back River Project: Bathymetric Surveys of Lakes in the Goose and George Property Areas
	V6-3E	Geophysical Survey – Sabina Back River Project
	V6-6A	Back River Project: 2010 Fish and Fish Habitat Baseline Report
	V6-6B	Back River Project: 2011 Fish and Fish Habitat Baseline Report
	V6-6C	Back River Project: 2012 Fish and Fish Habitat Baseline Report
Volume 7 - Marine Environment		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
	Executive Summary	Technical summary of Volume 7 in English, Inuktitut, and Inuinnaqtun
	Acronyms and Abbreviations	List of terminology used in Volume 7
1	Physical Processes	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and additional required information for the EIS guidelines

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
Volume 7 - Marine Environment (cont'd)		
2	Marine Water Quality	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
3	Marine Sediment Quality	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
4	Marine Fish/Aquatic Habitat	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
5	Marine Fish Community	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
6	Seabirds and Seaducks	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
7	Ringed Seals	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
Appendices	V7-1A	Back River Project: 2012 Marine Baseline Report
	V7-2A	Back River Project: Preliminary Desalination Assessment at the Marine Laydown Area, Bathurst Inlet, NU
	V7-4A	Back River Project: 2012 Marine Fish and Fish Habitat Baseline Report
Volume 8 - Human Environment		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
	Executive Summary	Technical summary of Volume 8 in English, Inuktitut, and Inuinnaqtun
	Acronyms and Abbreviations	List of terminology used in Volume 8
1	Archaeology	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
2	Paleontology	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and additional required information for the EIS guidelines
3	Socio-economics	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
4	Land Use	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)
5	Country Foods	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and residual and cumulative impact assessments (including transboundary effects)

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
Volume 8 - Human Environment (cont'd)		
6	Human Health and Environmental Risk Assessment	Presentation of existing environment and baseline information, incorporation of traditional knowledge, and additional required information for the EIS guidelines
Appendices	V8-1A	Archaeological Sites within the LSA and TCWR Winter Road Connector Assessment Area
	V8-1B	Back River Project: Cumulative Heritage Baseline Report 2013
	V8-3A	Back River Project: 2012 Socio-economic and Land Use Baseline Report
	V8-3B	Back River Project: 2013 Economic Impact Model Report
	V8-5A	Back River Project: Country Foods Baseline Screening Level Risk Assessment
	V8-6A	Predicted Metal Concentrations Associated with Fugitive Dust at George Property Sites
	V8-6B	Predicted Metal Concentrations Associated with Fugitive Dust at Goose Property Sites
	V8-6C	Predicted Metal Concentrations in Freshwater Lakes from Dust Deposition within the Freshwater Environment Local Study Area
	V8-6D	Predicted Metal Concentrations in Freshwater Lake Sediment from Dust Deposition within the Freshwater Environment Local Study Area
	V8-6E	Predicted Metal Concentrations in Soil from Dust Deposition for Sites Within the Terrestrial Environment Local Study Area
	V8-6F	Predicted Metal Concentrations in Lichen (<i>Cladina stygia</i> and <i>Stereocaulon paschale</i>) and Sedge (<i>Carex aquatilis</i>) Due to Root Uptake of Metals and Direct Deposition of Metals in Dustfall for Sites Within the Terrestrial Environment Local Study Area
	V8-6G	Predicted Metal Concentrations in Bog Blueberry (<i>Vaccinium uliginosum</i>) and Bog Cranberry (<i>V. vitis-idaea</i>) due to Root Uptake of Metals and Direct Deposition of Metals in Dustfall for Sites within the Terrestrial Environment Local Study Area
	V8-6H	Predicted Metal Concentrations in Lichen (<i>Cladina stygia</i> and <i>Stereocaulon paschale</i>) and Sedge (<i>Carex aquatilis</i>) for Sites Within the Terrestrial Environment Local Study Area
	V8-6I	Predicted Metal Concentrations in Bog Blueberry (<i>Vaccinium uliginosum</i>) and Bog Cranberry (<i>V. vitis-idaea</i>) for Sites Within the Terrestrial Environment Local Study Area
	V8-6J	Predicted Metal Concentrations in Air at George and Goose Camps
	V8-6K	Predicted Water Quality in Lakes of the Goose and George Property Areas Within the Human Health Risk Assessment Local Study Area Due to Direct Deposition of Metals in Dustfall
	V8-6L	Predicted Metal Concentrations in Soil from Dust Deposition for Sites within the Human Health Risk Assessment Local Study Area

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
Volume 8 - Human Environment (cont'd)		
	V8-6M	Predicted Metal Concentrations in Lichen (<i>Cladina stygia</i> and <i>Stereocaulon paschale</i>) and Sedge (<i>Carex aquatilis</i>) Due to Root Uptake of Metals from Soil and Direct Deposition of Metals in Dustfall for Sites Within the Human Health Risk Assessment Local Study Area
	V8-6N	Predicted Metal Concentrations in Bog Blueberry (<i>Vaccinium uliginosum</i>) and Bog Cranberry (<i>V. vitis-idaea</i>) due to Root Uptake of Metals and Direct Deposition of Metals in Dustfall for Sites Within the Human Health Risk Assessment Local Study Area
	V8-6O	Predicted Metal Concentrations in Lichen (<i>Cladina stygia</i> and <i>Stereocaulon paschale</i>) and Sedge (<i>Carex aquatilis</i>) for Sites Within the Human Health Risk Assessment Local Study Area
	V8-6P	Predicted Metal Concentrations in Bog Blueberry (<i>Vaccinium uliginosum</i>) and Bog Cranberry (<i>V. vitis-idaea</i>) for Sites Within the Human Health Risk Assessment Local Study Area
Volume 9 - Methodology, Effects of Environment on Project, Accidents and Malfunctions		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
	Executive Summary	Technical summary of Volume 9 in English, Inuktitut, and Inuinnaqtun
	Acronyms and Abbreviations	List of terminology used in Volume 9
1	General Methodology for Project Effects Assessment, Cumulative Effects Assessment, and Transboundary Effects Assessment	Description of the methodology for the project effects assessment, cumulative effects assessment, and the transboundary effects assessment
2	Effects of the Environment on the Project	Summary of the Project's effects on the environment.
3	Accidents and Malfunctions	Mitigation measures and risk assessment for potential accidents and malfunctions
Appendices	V9-3A	2013 Bathurst Inlet Marine Diesel Fuel Spill Modelling Report
Volume 10 - Management Plans		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
1	Overall Environmental Management Plan	Details on the Overall Environmental Management Plan
2	Environmental Protection Plan	Details on the Environmental Protection Plan
3	Risk Management and Emergency Response Plan	Details on the Risk Management and Emergency Response Plan

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
Volume 10 - Management Plans (cont'd)		
4	Fuel Management Plan	Details on the Fuel Management Plan
5	Spill Contingency Plan	Details on the Spill Contingency Plan
6	Oil Pollution Emergency Plan	Details on the Oil Pollution Emergency Plan
7	Site Water Monitoring and Management Plan	Details Site Water Monitoring and Management Plan
8	Ore Storage Management Plan	Details on the Ore Storage Management Plan
9	Mine Waste Rock and Tailings Management Plan	Details on the Mine Waste Rock and Tailings Management Plan
10	Landfill and Waste Management Plan	Details on the Landfill and Waste Management Plan
11	Incineration Management Plan	Details on the Incineration Management Plan
12	Hazardous Materials Management Plan	Details on the Hazardous Materials Management Plan
13	Explosives Management Plan	Details on the Explosives Management Plan
14	Road Management Plan	Details on the Road Management Plan
15	Shipping Management Plan	Details on the Shipping Management Plan
16	Borrow Pits and Quarry Management Plan	Details on the Borrow Pits and Quarry Management Plan
17	Air Quality Monitoring and Management Plan	Details on the Air Quality Monitoring and Management Plan
18	Noise Abatement Plan	Details on the Noise Abatement Plan
19	Conceptual Aquatic Effects Management Plan	Details on the Aquatic Effects Management Plan
20	Wildlife Mitigation and Monitoring Plan	Details on the Wildlife Mitigation and Monitoring Plan
21	Draft Conceptual Fish Offsetting Plan (No Net Loss Plan)	Details on the Draft Conceptual Fish Offsetting Plan (No Net Loss Plan)
22	Metal Leaching and Acid Rock Drainage Management Plan	Details on the Metal Leaching and Acid Rock Drainage Management Plan
23	Socio-economic Monitoring Plan	Details on the Socio-economic Monitoring Plan
24	Business Development Plan	Details on the Business Development Plan
25	Occupational Health and Safety Plan	Details on the Occupational Health and Safety Plan

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
Volume 10 - Management Plans (cont'd)		
26	Community Involvement Plan	Details on the Community Involvement Plan
27	Cultural and Heritage Resources Protection Plan	Details on the Cultural and Heritage Resources Protection Plan
28	Human Resources Plan	Details on the Human Resources Plan
29	Mine Closure and Reclamation Plan	Details on the Mine Closure and Reclamation Plan
Volume 11 - Type A Water Licence Application		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
	Executive Summary	Technical summary of Volume 11 in English, Inuktitut, and Inuinnaqtun
1	Introduction	Introduction to the Type A Water Licence Application
2	Minimum Application Requirements	Information to address Section 2.0 - Minimum Application Requirements presented in <i>Appendix C: Nunavut Water Board Information Requirements for a Type A Water Licence Application of the NIRB Guidelines for the Preparation of an Environmental Impact Statement for Sabina Gold & Silver Corp.'s Back River Project (NIRB File No. 12MN036)</i> , April 30, 2013
3	General Water Licence Application	Information to address Section 3.0 General Water Licence Application presented in <i>Appendix C: Nunavut Water Board Information Requirements for a Type A Water Licence Application of the NIRB Guidelines for the Preparation of an Environmental Impact Statement for Sabina Gold & Silver Corp.'s Back River Project (NIRB File No. 12MN036)</i> , April 30, 2013
4	Back River Project Description	Information to address Section 4.0 - Project Description presented in <i>Appendix C: Nunavut Water Board Information Requirements for a Type A Water Licence Application of the NIRB Guidelines for the Preparation of an Environmental Impact Statement for Sabina Gold & Silver Corp.'s Back River Project (NIRB File No. 12MN036)</i> , April 30, 2013
5	Baseline Information	Information to address Section 5.0 - Baseline Information presented in <i>Appendix C: Nunavut Water Board Information Requirements for a Type A Water Licence Application of the NIRB Guidelines for the Preparation of an Environmental Impact Statement for Sabina Gold & Silver Corp.'s Back River Project (NIRB File No. 12MN036)</i> , April 30, 2013
6	Water Use and Water Management	Information to address Section 6.0 - Water Use presented in <i>Appendix C: Nunavut Water Board Information Requirements for a Type A Water Licence Application of the NIRB Guidelines for the Preparation of an Environmental Impact Statement for Sabina Gold & Silver Corp.'s Back River Project (NIRB File No. 12MN036)</i> , April 30, 2013

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
Volume 11 - Type A Water Licence Application (cont'd)		
7	Waste Disposal and Management	Information to address Section 7.0 - Waste Disposal presented in <i>Appendix C: Nunavut Water Board Information Requirements for a Type A Water Licence Application</i> of the NIRB <i>Guidelines for the Preparation of an Environmental Impact Statement for Sabina Gold & Silver Corp.'s Back River Project</i> (NIRB File No. 12MN036), April 30, 2013
8	General Monitoring and Aquatic Effects Monitoring	Information to address Section 8.0 - Monitoring presented in <i>Appendix C: Nunavut Water Board Information Requirements for a Type A Water Licence Application</i> of the NIRB <i>Guidelines for the Preparation of an Environmental Impact Statement for Sabina Gold & Silver Corp.'s Back River Project</i> (NIRB File No. 12MN036), April 30, 2013
9	Project-specific Information Requirements (PSIR)	Information to address Section 9.0 Project-specific Information Requirements (PSIR) in <i>Appendix C: Nunavut Water Board Information Requirements for a Type A Water Licence Application</i> of the NIRB <i>Guidelines for the Preparation of an Environmental Impact Statement for Sabina Gold & Silver Corp.'s Back River Project</i> (NIRB File No. 12MN036), April 30, 2013
Appendices	V11-1A	SIG Concordance
	V11-1B	NIRB/NPC Determination
	V11-2A	General Water Licence Application
	V11-3A	Proponent Information
	V11-4A	Back River Project: Geochemical Characterization and ML/ARD Potential Report
	V11-4B	Back River Project: Preliminary Alternative for Waste and Water Management Memo
	V11-4C	Waste and Water Management Report for Draft Environmental Impact Statement
	V11-4D	Back River Project: Goose Property Water Quality Prediction Report
	V11-5A	Environmental Baseline and Assessment
	V11-6A	Design Documentation and Drawings (Water Use)
	V11-7A	Design Documentation and Drawings (Waste)
	V11-8A	Management Plans and Reports
	V1-9A	Project-specific Information Requirements (PSIR)
Volume 12 - Other Approvals		
	Document Structure Figure	Overview of the EIS document structure
	Project Fact Sheet	Overview of the Project components
	Back River Project Site Preparation Summary (Executive Summary)	Technical summary of Volume 12 in English, Inuktitut, and Inuinnaqtun

Appendix V1-7. DEIS Document Index

Chapter	Title	Contents
Volume 12 - Other Approvals (cont'd)		
	Preamble - Structure of Volume 12	Provision of Project licensing and authorization background and description of volume structure
1	Back River Project Site Preparation Summary	Summary of approvals and activities for site preparation
2	Location Map and Figures	Location maps and figures associated with construction, operation, and closure
3	Proponent Information	Proponent and Project information
4	Site Preparation Activities and Components	Overview of the infrastructure that will be advanced during site preparation and construction
5	Environmental Assessment of Site Preparation Activities	Environmental assessment of site preparation activities
6	Spills Contingency Plan	Details on the Goose Spill Contingency Plan, George Spill Contingency Plan, and the Marine Laydown Area Spill Contingency Plan
7	Closure Plan	Details on closure for the Project
8	Transportation Plan	Details on the Transportation Management Plan for the Project
Appendices	V12-1A	Type A Water License Correspondence and Application for Marine Laydown Area and Winter Roads
	V12-1B	KIA Surface Access Correspondence and Applications for IOL
	V12-1C	AANDC Surface Access Correspondence and Applications for Crown Land
	V12-1D	DFO Correspondence and Applications
	V12-1E	Transport Canada Correspondence and Applications
	V12-2A	NWB Renewal and Amendment for 2BEG001015
	V12-2B	NWB Renewal and Amendment for 2BEG001015
	V12-2C	NWB New Type B Application for Marine Laydown Area and Winter Road
	V12-2D	AANDC Amendment to N2010F0029
	V12-2E	KIA Amendment to KTL304C017
	V12-2F	KIA Amendment to KTP11Q001
	V12-2G	KIA Amendment to KTL304C018
	V12-2H	KIA Amendment to KTL304F049
	V12-2I	KIA New Quarry Application for Goose Property
	V12-2J	KIA New Quarry Application for Marine Laydown Area
	V12-3A	NIRB Screening Decisions

Appendix V1-8

DEIS Complete Table of Contents

BACK RIVER PROJECT

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Appendix V1-8.

DEIS Complete Table of Contents

Main Volume

Plain Language Summary.....	i
Executive Summary	lxi
Table of Contents	cxlv
List of Figures	cli
List of Tables.....	clii
List of Appendices.....	cliii
Glossary	clv
Acronyms and Abbreviations	clxxxvii
1. Introduction	1-1
1.1 Proponent Information	1-2
1.2 Regional Context	1-3
1.3 Land Tenure	1-3
1.4 Need and Purpose of the Project.....	1-3
1.4.1 Precautionary Principle	1-5
1.5 Alternatives	1-6
1.5.1 Discussion of Major (Tier One) Alternatives for the Project	1-6
1.5.2 Discussion of Alternatives (Tier Two) within the Project	1-6
1.6 Optimization of Benefits of the Project.....	1-7
1.7 Future Development	1-8
1.7.1 Project Phases	1-8
1.7.2 Potential Development Area	1-8
1.7.3 Potential Use of Infrastructure and Development of Additional Ore Deposits.....	1-8
1.8 Regulatory Regime	1-9
1.8.1 NIRB Exception from Review	1-9
2. Public Consultation and Engagement and Government Engagement.....	2-1
2.1 Public Consultation and Engagement	2-1

2.2	Government Engagement	2-3
3.	Project Description.....	3-1
3.1	Introduction	3-1
3.1.1	Current Activities.....	3-1
3.1.2	Future Development	3-3
3.1.3	Land and Mineral Tenure.....	3-3
3.1.4	Project Phases	3-3
3.2	Project Development Considerations	3-4
3.2.1	Sustainability	3-4
3.2.2	Public Consultation and Traditional Knowledge	3-4
3.2.3	Biophysical Environment	3-4
3.2.4	Economic Impacts of the Project	3-7
3.2.5	Potential Effects of Environment.....	3-7
3.3	Project Infrastructure	3-8
3.3.1	Access to Project Sites	3-8
3.3.1.1	Logistics	3-8
3.3.1.2	Marine Shipping and Marine Laydown Area Facilities.....	3-8
3.3.1.3	Air Transportation	3-17
3.3.1.4	Winter Roads.....	3-17
3.3.1.5	All-weather Roads	3-18
3.3.2	Marine Laydown Area Site Preparation and Construction	3-18
3.3.3	Goose Property Site Preparation and Construction	3-19
3.3.4	George Property Site Preparation and Construction	3-20
3.3.5	Tailings Impoundment Area (TIA) Construction	3-21
3.3.5.1	Dam Hazard Classification.....	3-21
3.3.5.2	TIA Development Plan and Schedule	3-21
3.3.5.3	TIA Monitoring	3-22
3.3.6	General Waste Facilities Site Preparation and Construction	3-22
3.4	Operations	3-23
3.4.1	Resources and Reserves	3-23
3.4.2	Geology and Mineralogy	3-24
3.4.3	Mining.....	3-24
3.4.3.1	Lake and Mine Workings Dewatering	3-26
3.4.4	Waste Rock Management.....	3-27
3.4.5	Ore Management	3-27
3.4.6	Mineral Processing.....	3-27
3.4.7	Tailings Management	3-28
3.4.7.1	Managing the Tailings Impoundment Area.....	3-29
3.4.8	Water Management	3-29
3.4.8.1	Water Use and Supply	3-29
3.4.8.2	Surface Water Management.....	3-30

4.	Traditional Knowledge.....	4-1
5.	Existing Environment and Baseline Information	5-1
5.1	Atmospheric Environment.....	5-2
5.1.1	Air Quality	5-2
5.1.2	Noise and Vibration	5-3
5.1.3	Climate and Meteorology	5-4
5.2	Terrestrial Environment.....	5-5
5.2.1	Geology and Permafrost.....	5-5
5.2.2	Landforms and Soils.....	5-5
5.2.3	Vegetation and Special Landscape Features.....	5-6
5.2.4	Caribou	5-6
5.2.5	Grizzly Bear	5-8
5.2.6	Muskox.....	5-8
5.2.7	Wolverine/Furbearers	5-9
5.2.8	Migratory Birds.....	5-10
5.2.9	Raptors	5-11
5.3	Freshwater Environment	5-12
5.3.1	Surface Hydrology	5-12
5.3.2	Limnology and Bathymetry	5-12
5.3.3	Groundwater	5-13
5.3.4	Freshwater Water Quality	5-13
5.3.5	Freshwater Sediment Quality	5-13
5.3.6	Freshwater Fish/Aquatic Habitat.....	5-14
5.3.7	Freshwater Fish Community	5-15
5.4	Marine Environment.....	5-15
5.4.1	Physical Processes.....	5-15
5.4.2	Marine Water Quality	5-16
5.4.3	Marine Sediment Quality	5-16
5.4.4	Marine Fish/Aquatic Habitat	5-16
5.4.5	Marine Fish Community.....	5-17
5.4.6	Seabirds and Seaducks.....	5-17
5.4.7	Ringed Seals	5-18
5.5	Human Environment	5-19
5.5.1	Archaeology and Paleontology	5-19
5.5.2	Socio-economics	5-20
5.5.3	Land Use	5-21
5.5.4	Country Foods.....	5-22
6.	Potential Effects Assessment.....	6-1
6.1	Methodology Overview	6-1
6.1.1	Scope of the Assessment and Selection of VECs/VSECs.....	6-2

6.1.2	Assessment Boundaries	6-2
6.1.3	Identification of Potential Interactions with Project and VECs/VSECs	6-9
6.1.4	Characterization of Potential Effects.....	6-9
6.1.5	Identification of Mitigation and Management Measures	6-9
6.1.6	Characterization of Residual Effects.....	6-10
6.1.7	Determining the Significance of Residual Effects.....	6-10
6.2	Atmospheric Environment.....	6-11
6.2.1	Air Quality	6-12
6.2.2	Noise and Vibration	6-12
6.3	Terrestrial Environment.....	6-13
6.3.1	Vegetation and Special Landscape Features.....	6-13
6.3.2	Caribou	6-14
6.3.3	Grizzly Bear	6-14
6.3.4	Muskox.....	6-15
6.3.5	Wolverine/Furbearers	6-15
6.3.6	Migratory Birds	6-15
6.3.7	Raptors	6-16
6.4	Freshwater Environment	6-16
6.4.1	Hydrology	6-17
6.4.2	Freshwater Water Quality	6-17
6.4.3	Freshwater Sediment Quality	6-17
6.4.4	Freshwater Fish/Aquatic Habitat.....	6-18
6.4.5	Freshwater Fish Community	6-18
6.5	Marine Environment.....	6-19
6.5.1	Marine Water Quality	6-19
6.5.2	Marine Sediment Quality	6-20
6.5.3	Marine Fish/Aquatic Habitat	6-20
6.5.4	Marine Fish Community.....	6-20
6.5.5	Seabirds and Seaducks.....	6-21
6.5.6	Ringed Seals	6-21
6.6	Human Environment	6-21
6.6.1	Archaeology	6-22
6.6.2	Socio-economics	6-22
6.6.3	Land Use	6-25
6.6.4	Country Foods	6-26
6.7	Transboundary Potential Effects.....	6-27
6.7.1	Atmospheric Environment.....	6-27
6.7.2	Terrestrial Environment	6-27
6.7.3	Freshwater Environment	6-28
6.7.4	Marine Environment.....	6-28
6.7.5	Human Environment	6-28

6.8	Summary of Residual Effects and Significance	6-29
7.	Mitigation and Adaptive Management	7-1
7.1	Atmospheric Environment.....	7-3
7.1.1	Air Quality	7-3
7.1.2	Noise and Vibration	7-3
7.2	Terrestrial Environment.....	7-4
7.2.1	Vegetation and Special Landscape Features.....	7-4
7.2.2	Caribou	7-4
7.2.3	Grizzly Bear	7-4
7.2.4	Musk Ox	7-4
7.2.5	Wolverine/Furbearers	7-4
7.2.6	Migratory Birds.....	7-4
7.2.7	Raptors	7-4
7.3	Freshwater Environment	7-5
7.3.1	Hydrology	7-5
7.3.2	Freshwater Water Quality	7-5
7.3.3	Freshwater Sediment Quality	7-5
7.3.4	Freshwater Fish/Aquatic Habitat.....	7-5
7.3.5	Freshwater Fish Community	7-5
7.4	Marine Environment.....	7-6
7.4.1	Marine Water Quality	7-6
7.4.2	Marine Sediment Quality	7-6
7.4.3	Marine Fish/Aquatic Habitat	7-6
7.4.4	Marine Fish Community.....	7-6
7.4.5	Seabirds and Seaducks.....	7-6
7.4.6	Ringed Seals	7-6
7.5	Human Environment	7-7
7.5.1	Archaeology	7-7
7.5.2	Socio-economics	7-7
7.5.2.1	Employment.....	7-7
7.5.2.2	Health and Community Well-being	7-7
7.5.3	Land Use	7-7
7.5.3.1	Non-traditional Land and Resource Use.....	7-7
7.5.3.2	Subsistence Economy and Land Use	7-7
7.5.4	Country Foods	7-8
8.	Potential Cumulative Effects Assessment.....	8-1
8.1	Methodology Overview	8-1
8.2	Atmospheric Environment.....	8-2
8.2.1	Air Quality	8-2
8.2.2	Noise and Vibration	8-2

8.3	Terrestrial Environment	8-5
8.3.1	Vegetation and Special Landscape Features.....	8-5
8.3.2	Caribou	8-5
8.3.3	Grizzly Bear	8-5
8.3.4	Musk Ox	8-6
8.3.5	Wolverine/Furbearers	8-6
8.3.6	Migratory Birds.....	8-7
8.3.7	Raptors	8-7
8.4	Freshwater Environment	8-7
8.4.1	Hydrology	8-7
8.4.2	Freshwater Water Quality	8-7
8.4.3	Freshwater Sediment Quality	8-7
8.4.4	Freshwater Fish/Aquatic Habitat.....	8-7
8.4.5	Freshwater Fish Community	8-8
8.5	Marine Environment.....	8-8
8.5.1	Marine Water Quality	8-8
8.5.2	Marine Sediment Quality	8-8
8.5.3	Marine Fish/Aquatic Habitat	8-8
8.5.4	Marine Fish Community.....	8-8
8.5.5	Seabirds and Seaducks.....	8-8
8.5.6	Ringed Seals	8-9
8.6	Human Environment	8-9
8.6.1	Archaeology	8-9
8.6.2	Socio-Economics	8-9
8.6.2.1	Employment.....	8-9
8.6.2.2	Health and Community Well-being	8-9
8.6.3	Land Use	8-10
8.6.3.1	Non-traditional Land and Resource Use.....	8-10
8.6.3.2	Subsistence Economy and Land Use	8-10
8.6.4	Country Foods.....	8-10
8.7	Summary of Residual Cumulative Effects and Significance	8-10
9.	Reclamation and Closure.....	9-1
9.1	Overview and Schedule.....	9-1
9.2	Regulatory Framework regarding Mine Closure	9-2
9.3	Closure Objectives	9-3
9.4	Open Pits.....	9-4
9.5	Waste Rock Stockpiles	9-4
9.6	Tailings Storage Facility	9-5
9.7	Buildings and Equipment	9-6
9.8	Roads and Airstrips.....	9-6
9.9	Pipelines and Power Distribution Lines	9-6

FIGURE	PAGE
Figure 1. Project Location	ii
Figure 2. Project Site Layout for 2013 DEIS.....	iii
Figure 3. Project Development Area and Infrastructure Areas - Goose Property Area	v
Figure 4. Project Development Area and Infrastructure Areas - George Property Area	vii
Figure 5. Marine Laydown Area and Shipping Lane	xi
ᐃᑲᓕᐱᓂᐅ 1: ᓴᓇᐃᓪᑐ ᓇᒥᓴᓴᓕᐱᓂᐅ	xx
ᐃᑲᓕᐱᓂᐅ 2: ᓴᓇᐃᐅᓪᑐᓴᓴᓪᑐ ᓇᒥᓴᓴᓕᐱᓂᐅ 2013-ᒥ DEIS	xxi

ᓄᓇᓂᓄᓐᓇ 3: ᓇᓇᓇᓇᓇᓇ ᓇᓇᓇᓇᓇᓇᓇᓇᓇ ᓇᓇᓇᓇᓇᓇ ᓇᓇᓇᓇᓇᓇᓇᓇᓇ ᓇᓇᓇᓇᓇᓇ - ᓂᓇᓇ ᓄᓇᓇᓇᓇᓇᓇ xxv	
ᓄᓇᓂᓄᓐᓇ 4. ᓇᓇᓇᓇᓇᓇ ᓇᓇᓇᓇᓇᓇᓇᓇᓇ ᓇᓇᓇᓇᓇᓇ ᓇᓇᓇᓇᓇᓇᓇᓇᓇᓇ ᓇᓇᓇᓇᓇᓇ - ᓇᓇᓇᓇ ᓄᓇᓇᓇᓇᓇᓇᓇxxvii	
ᓄᓇᓂᓄᓐᓇ 5. ᓇᓇᓇᓇ ᓇᓇᓇᓇᓇᓇᓇᓇ ᓇᓇᓇᓇᓇᓇ ᓇᓇᓇᓇᓇᓇᓇᓇᓇ.....xxxi	
Titigauiyag 1. Havanguiyag Inaaxlii	
Titigauiyag 2. Havanguiyag Inaa Qanugitnia taphumunga 2013 DEIS xliii	
Titigauiyag 3. Havanguiyag Pivaliatitnia Nuna Havagutitlu Nunat - Goose Havakvia Nuna xlv	
Titigauiyag 4. Havanguiyag Pivaliatitnia Nuna Havagutitlu Nunat - George Havakvia Nuna xlix	
Titigauiyag 5. Tagiumi Iliuqaqvik Nuna Umiaqpaitlu Apquta li	
Figure 1-1. Back River Project Location and Kitikmeot Communities.....1-4	
Figure 3.1-1. Back River Project Location3-2	
Figure 3.1-2. Sabina Mineral Tenure Map3-5	
Figure 3.3-1. Project Development Area and Infrastructure Areas - Marine Laydown Area.....3-9	
Figure 3.3-2. Project Development Area and Infrastructure Areas - Goose Property 3-11	
Figure 3.3-3. Project Development Area and Infrastructure Areas - George Property..... 3-13	
Figure 3.3-4. Road Corridor Overview 3-15	
Figure 10.1-1. Environmental Management System 10-3	

List of Tables

TABLE	PAGE
Table 1. Project Phaseslxii	
ᓇᓇᓇᓇᓇᓇᓇᓇᓇᓇ 1. ᓇᓇᓇᓇᓇᓇᓇᓇᓇᓇ lxxxvi	
Naonaiyaota 1. Havagiyaoniaktot.....cxiv	
Table 1.7-1. Life of Project.....1-8	
Table 3.1-1. Expected Life of Project3-1	
Table 3.1-2. Project Phases3-4	
Table 3.3-1. Design Basis for the Tailings Impoundment Area 3-22	
Table 3.4-1. Total Mineral Reserves for the Back River Project (May 1, 2013)..... 3-23	
Table 3.4-2. Summary of Goose Property Mine Operation 3-25	
Table 3.4-3. Summary of George Site Mining Operation..... 3-26	
Table 3.4-4. Water Supply during Operations 3-30	

Table 3.4-5. Drainage Pattern Alteration at the Goose Property	3-31
Table 3.4-6. Drainage Pattern Alterations at George Property	3-31
Table 5-1. Summary of Field-collected Baseline Information for the Back River Project	5-1
Table 6.1-1. Valued Ecosystem Component and Valued Socio-economic Component Scoping Process Information	6-3
Table 6.8-1. Summary of Project-related Residual Effects and Significance	6-30
Table 8.1-1. Past, Existing, and Reasonably Foreseeable Future Projects with the Potential to Interact with the Back River Project.....	8-3
Table 8.7-1. Summary of Cumulative Residual Effects and Significance	8-11
Table 9.14-1. Proposed Reclamation Studies.....	9-10
Table 10.1-1. Core Elements of Sabina's Environment Management System	10-2
Table 10.4-1. List of Environmental Management Plans for the Back River Project	10-5

List of Appendices

Appendix V1-1. Table of Concordance
Appendix V1-2. List of Permits, Licences, and Authorizations Required for Project
Appendix V1-3. Land and Water Interests
Appendix V1-4. List of Consultants Contributing to DEIS
Appendix V1-5. List of Agencies, Organizations, and Persons for DEIS Distribution
Appendix V1-6. Commitments Table
Appendix V1-7. DEIS Document Index
Appendix V1-8. DEIS Complete Table of Contents

Volume 2. Project Description and Alternatives

Executive Summary	i
Preamble - Structure of Volume 2.....	xxv
Table of Contents	xxvii
List of Figures	xxxvi
List of Tables.....	xxxvi
List of Appendices	xxxviii
Acronyms and Abbreviations	xxxix
1. Introduction	1-1
1.1 Proponent Information	1-1
1.2 Regional Context	1-2
1.3 Land Tenure	1-2
1.4 Mineral Tenure.....	1-2
1.5 Permits, Licences, and Authorizations	1-2
1.6 Project Overview	1-2
1.7 Current Activities.....	1-6
1.8 Analysis of Need and Purpose of the Project.....	1-6
2. Project Components and Activities	2-1
2.1 Project Design Considerations	2-1
2.1.1 Biophysical Environment	2-1
2.1.2 Climate Change	2-1
2.1.3 Ecosystem Integrity	2-2
2.1.4 Application of the Precautionary Approach	2-2
2.1.5 Workers Health and Safety	2-3
2.1.6 Wildlife.....	2-4
2.1.7 Socio-economic Conditions	2-4
2.1.8 Archaeological and Cultural Sites	2-5
2.1.9 Consideration of Current Land Use Activities	2-5
2.1.10 Public Consultation and Traditional Knowledge	2-5
2.1.11 Future Development	2-5
2.1.12 Other Considerations	2-5
2.2 Project Phases	2-6
2.3 Project Permitting	2-6
2.3.1 NIRB Exception from Review	2-7
3. Future Development	3-1
3.1 Foreseeable Expansion of the Project	3-1
3.2 Potential Development of Additional Ore Deposits.....	3-1

4.	Alternatives	4-1
4.1	Method of Assessing Alternatives within the Project	4-1
4.2	Discussion of Major (Tier One) Alternatives within the Project.....	4-2
4.2.1	Project “Go/No-Go” Decision	4-2
4.2.2	Access and Transportation to the Project Site	4-3
4.2.2.1	Air Transportation	4-3
4.2.2.2	Marine Transportation	4-4
4.2.2.3	Overland Transportation and Access	4-5
4.2.3	Access and Transportation within the Project Locations.....	4-7
4.2.4	BIPR Alternatives	4-7
4.2.5	Mining and Quarry Operations.....	4-8
4.2.5.1	Open Pit and Underground Mine Operations	4-8
4.2.5.2	Options for Ore and Waste Rock Management.....	4-8
4.2.6	Ore Processing and Gold Recovery	4-10
4.2.6.1	Options for Production Rate Changes	4-10
4.2.6.2	Options for Processing the Ore and Gold Recovery	4-10
4.2.7	Alternatives for Tailings Storage	4-11
4.2.8	Power Generation	4-12
4.2.9	Closure and Reclamation Options	4-12
4.2.9.1	Abandonment and Reclamation of Project	4-12
4.2.9.2	Care and Maintenance Closure of Project	4-13
4.2.9.3	Seasonal Closure of Marine Laydown Area	4-13
4.3	Discussion of Alternatives (Tier Two) within the Project	4-13
4.3.1	Site Selection	4-14
4.3.1.1	Site Selection for the Goose and George Properties.....	4-14
4.3.1.2	Site Selection for the Marine Laydown Area	4-14
4.3.1.3	Options for Quarry Sites	4-14
4.3.1.4	Emergency Shelters, Seasonal/Temporary Exploration Camps	4-15
4.3.2	Infrastructure	4-15
4.3.2.1	Goose Property Area	4-15
4.3.2.2	George Property.....	4-16
4.3.2.3	Marine Laydown Area	4-17
4.3.3	Water Management	4-18
4.3.3.1	Site Water Management	4-18
4.3.3.2	Methods for Mine Dewatering.....	4-18
4.3.3.3	Site Water Treatment.....	4-19
4.3.4	Options for Equipment	4-20
4.3.5	Options for Future Development of Other Mineral Deposits	4-20
4.3.6	Bulk Fuel Storage Alternatives	4-21
4.3.7	On-site Accommodations and Worker-related Issues.....	4-21
4.3.7.1	Work Scheduling during Operation.....	4-21

4.3.7.2	Worker Sourcing (Direct Points of Hire)	4-22
5.	Economic and Operating Environment	5-1
5.1	Project Expenditures	5-1
5.1.1	Construction	5-1
5.1.2	Operation	5-1
5.2	Employment	5-1
5.2.1	Construction	5-1
5.2.2	Operation	5-1
5.3	Origin of Workforce	5-1
5.4	Labour Income	5-2
5.5	Contracting	5-2
5.6	Work Schedule, Transportation and Housing	5-2
5.7	Training and Benefit Programs	5-2
5.8	Inuit Impact and Benefit Agreement	5-3
5.9	Governance and Leadership Context	5-3
6.	Detailed Project Proposal Description - Site Preparation and Construction	6-1
6.1	Site Preparation and Construction - Overview	6-1
6.2	Project Development Areas	6-1
6.2.1	Potential Development Area	6-2
6.3	Access to Project Sites	6-2
6.3.1	Air Access	6-2
6.3.1.1	Goose Property Air Strip	6-3
6.3.1.2	George Property Air Strip	6-3
6.3.1.3	Marine Laydown Area Air Strip	6-3
6.3.1.4	Air Transportation Security	6-3
6.3.1.5	Emergency Response	6-4
6.3.2	Overland Access	6-4
6.3.3	Marine Access and Shipping Route	6-4
6.3.3.1	Shipping Season	6-4
6.3.3.2	Shipping	6-4
6.3.3.3	Navigational Aids	6-5
6.3.3.4	Shipping Management Plan	6-6
6.4	Site Preparation and Construction of the Marine Laydown Area	6-6
6.4.1	MLA Development Sequence	6-7
6.4.2	Use of the Marine Laydown Area	6-7
6.4.3	Site Roads and Water Crossings	6-7
6.4.3.1	Public Access to Roads	6-8
6.4.4	Dock Construction	6-8
6.4.5	Goods and Supply Received at the Marine Laydown Area	6-8
6.4.5.1	Laydown Area and Material Storage	6-8

6.4.5.2	Construction Material, Equipment and Supplies.....	6-8
6.4.5.3	Consumables, Reagents and Explosives	6-9
6.4.5.4	Waste Transfer Station.....	6-9
6.4.5.5	Loading and Offloading Procedures.....	6-9
6.4.5.6	Potential Interference or Synergies with Community and Outpost Resupply (Kingaok and Cambridge Bay)	6-9
6.4.6	Fuel	6-10
6.4.6.1	Land-based Tank Farm	6-10
6.4.7	Spill Contingency and Emergency Response	6-10
6.4.8	Communication System.....	6-11
6.4.9	Power Generation	6-11
6.4.10	Marine Laydown Area Security	6-11
6.4.11	Water Supply	6-11
6.4.12	Site Water Management for the Marine Laydown Area	6-11
6.4.13	Sewage and Waste Water Treatment for the Marine Laydown Area	6-11
6.4.14	Waste Management for the Marine Laydown Area.....	6-12
6.4.15	Air Access to the Marine Laydown Area	6-12
6.5	Ground Transportation and Associated Water Crossings - Winter Road Corridors	6-12
6.5.1	Public Use of Winter Road Corridors	6-12
6.5.2	Expected Traffic on Winter Roads.....	6-12
6.5.3	Design and Construction of the Winter Road	6-13
6.5.3.1	General Design Criteria	6-13
6.5.3.2	Design Features to Facilitate Wildlife and Human Movement	6-13
6.5.3.3	Goose/George to Marine Laydown Area	6-13
6.5.3.4	George Winter Road Spur.....	6-13
6.5.4	Spill Contingency and Emergency Response	6-13
6.5.5	Winter Roads Maintenance	6-14
6.5.6	Water Use for Winter Road Construction and Maintenance.....	6-14
6.6	Site Preparation and Construction of the Goose Property	6-15
6.6.1	Water Use during Site Preparation and Construction	6-16
6.6.1.1	Water Demand for the Site Preparation and Construction	6-16
6.6.1.2	Construction of the Propeller Lake Pump Station.....	6-17
6.6.1.3	Water Intake Design	6-17
6.6.1.4	Drilling Activities.....	6-17
6.6.1.5	Water Supply and Treatment Methods	6-17
6.6.1.6	Water Uses in Maintenance Facilities and Vehicle Washing	6-17
6.6.2	Goose Property - Ground Transportation and Associated Water Crossings All-weather Roads	6-17
6.6.2.1	Site Roads and Water Crossings	6-17
6.6.2.2	Public Access to Roads	6-19
6.6.2.3	Laydown Area and Material Storage	6-19
6.6.3	Site Water Management during Site Preparation and Construction	6-19

6.6.4	Quarries/Borrow Sources and Overburden	6-20
6.6.5	Diesel Fuel Supply and Storage During Site Preparation and Construction....	6-21
6.6.5.1	Fuel Storage	6-21
6.6.5.2	Fuel Delivery to Back River Project Strategy	6-21
6.6.5.3	Fuel Consumption.....	6-21
6.6.6	Explosives and Ammonium Nitrate Storage during Construction.....	6-22
6.6.6.1	Explosives Storage	6-22
6.6.6.2	Emulsion Plant and Transportation to Work Sites	6-22
6.6.6.3	Ammonia Management	6-22
6.6.7	Chemical and Hazardous Materials Other than Fuel and Explosives.....	6-23
6.6.8	Waste Management during Site Preparation and Construction.....	6-23
6.6.8.1	Wastewater and Sewage	6-23
6.6.8.2	Non-hazardous Solid Waste Management	6-24
6.6.8.3	Incinerator	6-25
6.6.8.4	Landfills.....	6-25
6.6.8.5	Landfarm	6-25
6.6.8.6	Hazardous Waste Management	6-26
6.6.9	Air Transportation.....	6-26
6.6.10	Communication Systems	6-26
6.6.11	Power Generation	6-27
6.6.12	Ancillary Project Facilities and infrastructure	6-27
6.6.12.1	Workers Accommodation	6-27
6.6.12.2	Maintenance Facilities and Service Buildings	6-27
6.6.13	Construction of Tailings Impoundment Area.....	6-27
6.6.13.1	Site Selection	6-28
6.6.13.2	Design Basis and Operating Criteria	6-28
6.6.13.3	Summary of Geotechnical Investigations	6-33
6.6.13.4	General Description of Tailing Impoundment Area Layout	6-33
6.6.13.5	Tailings Impoundment Area Development Plan and Schedule	6-35
6.7	Site Preparation and Construction of the George Property.....	6-36
6.7.1	Water Use during Site Preparation and Construction	6-37
6.7.1.1	Water Supply.....	6-38
6.7.1.2	Water Intake Design	6-38
6.7.1.3	Drilling Activities.....	6-38
6.7.1.4	Water Treatment Methods	6-38
6.7.1.5	Water Uses in Maintenance Facilities and Vehicle Washing	6-38
6.7.2	George Property - Ground Transportation and Associated Water Crossings	
	All-weather Roads	6-39
6.7.2.1	Site Roads and Water Crossings	6-39
6.7.2.2	Public Access to Roads	6-39
6.7.2.3	Laydown Area and Material Storage	6-39

6.7.3	Site Water Management during Site Preparation and Construction	6-39
6.7.4	Construction of Perimeter Dikes - Lytle Lake and Occurrence Lake	6-40
6.7.4.1	Lytle Lake	6-40
6.7.4.2	Occurrence Lake	6-40
6.7.5	Quarries/Borrow Sources and Overburden	6-41
6.7.6	Diesel Fuel Supply and Storage during Site Preparation and Construction....	6-41
6.7.6.1	Fuel Delivery to the George Property	6-41
6.7.7	Explosives and Ammonium Nitrate Storage during Construction.....	6-42
6.7.7.1	Explosives Storage	6-42
6.7.7.2	Emulsion Plant and Transportation to Work Sites	6-42
6.7.7.3	Ammonia Management	6-42
6.7.8	Chemical and Hazardous Materials Other than Fuel and Explosives.....	6-42
6.7.9	Waste Management during Site Preparation and Construction.....	6-43
6.7.9.1	Wastewater and Sewage	6-43
6.7.9.2	Non-hazardous Solid Waste Management	6-44
6.7.9.3	Incinerator	6-44
6.7.9.4	Landfills.....	6-44
6.7.9.5	Landfarm	6-44
6.7.9.6	Hazardous Waste Management	6-45
6.7.10	Air Transportation	6-45
6.7.11	Power Generation	6-45
6.7.12	Ancillary Project Facilities and infrastructure	6-45
6.8	Summary of Site Preparation Activities (Year -4 to Year -3)	6-45
6.9	Summary of Construction Activities (Year -2 and Year -1).....	6-46
7.	Detailed Project Proposal Description - Operations.....	7-1
7.1	Resources and Reserves	7-1
7.1.1	Geology.....	7-2
7.1.2	Mineralization	7-3
7.1.2.1	Llama Deposit	7-3
7.1.2.2	Umwelt Deposit	7-6
7.1.2.3	Goose Main Deposit.....	7-6
7.1.2.4	George Project Mineralization.....	7-7
7.1.3	Overview of Hydrogeological Conditions and Permafrost	7-8
7.1.4	Overview of Precipitation and Hydrological Conditions	7-9
7.1.5	Overview of Geotechnical Conditions.....	7-11
7.1.5.1	Summary of Geotechnical Investigations Completed to Date	7-11
7.2	Mining.....	7-13
7.2.1	Review of Similar Operations.....	7-13
7.2.2	Measures to Control Extreme Natural Hazards Events	7-14
7.2.3	Mining Sequence	7-15
7.2.3.1	Cut-off grades	7-15

7.2.4	Open Pit Mining	7-15
7.2.4.1	Open Pit Design	7-17
7.2.4.2	Pit Slope Stability	7-18
7.2.4.3	Hydrogeological	7-19
7.2.4.4	Design of Impoundment / Retention Structures for Seepage and Runoff Control.....	7-19
7.2.5	Underground Mining.....	7-19
7.2.5.1	Underground Mining Method and Stope Design	7-20
7.2.5.2	Backfilling	7-21
7.2.5.3	Underground Mine Ventilation.....	7-21
7.2.5.4	Underground Mine Dewatering	7-22
7.2.6	Metal Leaching/Acid Rock Drainage.....	7-22
7.2.7	Waste Rock Storage Areas	7-24
7.2.7.1	Waste Rock Production	7-26
7.2.7.2	Waste Rock Disposal	7-26
7.2.7.3	Goose Property Waste Rock Storage Locations	7-28
7.2.7.4	George Property Waste Rock Storage Locations.....	7-28
7.2.7.5	Physical and Chemical Properties of the Waste Rock	7-28
7.2.8	Primary Crushing and Ore Stockpiles	7-28
7.2.8.1	Ore Grade and Quantities	7-28
7.2.8.2	Ore Handling and Stockpiling	7-28
7.2.8.3	Physical and Chemical Stability of the Ore.....	7-29
7.2.8.4	Runoff and Seepage Management.....	7-29
7.3	Mining Equipment	7-29
7.3.1	Open Pit Equipment.....	7-29
7.3.2	Underground Equipment	7-30
7.3.3	Surface Equipment	7-30
7.4	Power Supply And Fuel Supply/Storage	7-31
7.5	Communications Systems	7-31
7.6	Explosives and Ammonium Nitrate Storage during Operation	7-31
7.6.1	Explosives Storage.....	7-32
7.6.2	Emulsion Plant and Transportation to Work Sites	7-32
7.7	Chemical and Hazardous Materials Other than Fuel and Explosives.....	7-32
7.8	Milling Process Description	7-32
7.8.1	General.....	7-32
7.8.2	Crushing and Grinding	7-35
7.8.3	Leaching and Gold Recovery	7-35
7.8.4	Treatment of Leach Residue	7-35
7.8.5	Cyanide Destruction	7-35
7.8.6	Tailings Dewatering	7-35
7.8.7	Reagents	7-35

7.8.8	Mill Water Consumption	7-36
7.8.9	Mill Power Consumption.....	7-37
7.8.10	Storage and Transportation of Final Product	7-37
7.9	Tailings Impoundment Area	7-37
7.9.1.1	TIA Operations - Tailings Deposition Strategy	7-37
7.9.1.2	Seepage Control.....	7-37
7.9.1.3	Tailings Water Recycle Circuit - Ice Formation.....	7-38
7.9.1.4	Consolidated Tailings Chemistry	7-38
7.9.2	Monitoring of the Tailings Impoundment Area	7-38
7.10	Water Management During Operations	7-39
7.10.1	Water Use during Operations.....	7-39
7.10.2	Water Management at the Goose Property	7-40
7.10.2.1	Site Water Balance	7-40
7.10.2.2	Availability of Water during Winter and Exceptionally Low Flow Years	7-41
7.10.2.3	Alterations to Drainage Patterns as a Result of Mining at the Goose Property	7-41
7.10.2.4	Diversion and Collection Systems	7-41
7.10.2.5	Llama Lake Dewatering	7-43
7.10.2.6	Open Pit Water Management and Pit Dewatering during Mining Operation.....	7-44
7.10.2.7	Expected Pit Inflows and Water Quality	7-44
7.10.2.8	Underground Mine Dewatering	7-44
7.10.3	Water Management at the George Property.....	7-44
7.10.3.1	Availability of Water during Winter and Exceptionally Low Flow Years	7-44
7.10.3.1	Alterations to Drainage Patterns as a Result of Mining at the Goose Property	7-44
7.10.3.2	Perimeter Dikes in Lytle Lake and Occurrence Lake	7-46
7.10.3.3	Diversion and Collection Systems	7-46
7.10.3.4	Open Pit Dewatering and Water Management	7-47
7.10.3.5	Expected Pit Inflows and Water Quality	7-47
7.10.4	Water Management at the Marine Laydown Area.....	7-47
7.11	Other Infrastructure Required for Operation.....	7-47
7.11.1	Camps	7-47
7.12	Summary of Operation Activities at Goose Property.....	7-47
7.13	Summary of Operation Activities (Year 1 to 10) at George Property	7-47
8.	Detailed Project Proposal Description - Reclamation and Closure	8-1
8.1	Overview and Schedule.....	8-1
8.2	Regulatory Framework Regarding Mine Closure.....	8-2
8.3	Closure Objectives	8-3
8.4	Open Pits.....	8-4

8.5	Waste Rock Stockpiles	8-4
8.6	Tailings Impoundment Area	8-5
8.7	Buildings and Equipment	8-5
8.8	Roads and Airstrips	8-6
8.9	Pipelines and Power Distribution Lines	8-6
8.10	Waste Management Sites	8-6
8.11	Water Management Systems	8-6
	8.11.1 Goose Site Water Management during Closure	8-6
	8.11.2 George Site Water Management during Closure	8-7
8.12	Chemicals and Explosives	8-8
8.13	Contaminated Soil	8-8
8.14	Progressive Reclamation	8-8
	8.14.1 Definition of Progressive Reclamation	8-8
	8.14.2 Candidate Facilities/Areas and Reclamation Activities	8-9
	8.14.3 Progressive Reclamation Schedule	8-9
8.15	Closure and Post-closure Monitoring Programs	8-10
9.	Detailed Project Proposal Description - Environmental Management	9-1
9.1	Sabina Environmental Policy	9-1
9.2	Scope of Back River Project Management Plans	9-1
	9.2.1 Surveillance Network Program	9-2
	9.2.2 Water Management and Monitoring	9-4
	9.2.3 Dust and Drainage Management on Haul Roads	9-5
	9.2.4 Containment Contact Water	9-5
	9.2.5 Ammonia Management	9-5
	9.2.6 Chemical and Hazardous Materials Other than Fuel and Explosives	9-5
	9.2.7 Closure Monitoring	9-6
	References	R-1

List of Figures

FIGURE	PAGE
Figure 1.2-1. Back River Project Location and Kitikmeot Communities	1-3
Figure 1.4-1. Sabina Mineral Tenure Map	1-7
Figure 1.6-1. Back River Project Location	1-10
Figure 1.6-2. Project Development Area and Infrastructure Areas - Goose Property Area	1-11
Figure 1.6-3. Project Development Area and Infrastructure Areas - George Property Area	1-13
Figure 1.6-4. Project Development Area and Infrastructure Areas - Marine Laydown Area	1-15
Figure 1.6-5. Road Corridor Overview	1-17

Figure 4.2-1. Marine Shipping Routes	4-6
Figure 7.1-1. Goose Property Structural Geology.....	7-4
Figure 7.1-2. George Property Structural Geology	7-5
Figure 7.8-1. Back River Project Conceptual Process Arrangement	7-33
Figure 7.10-1. Conceptual Water Management - Goose Property.....	7-42
Figure 7.10-2. Conceptual Water Management - George Property	7-45
Figure 7.10-3. Conceptual Water Management - Marine Laydown Area	7-48

List of Tables

TABLE	PAGE
Table 1. Project Phases	ii
Table 1.3-1. Mineral Tenure Status (as of March 31, 2013)	1-4
Table 1.5-1. Current Authorizations and Permits (as of July 31, 2013).....	1-9
Table 1.8-1. Input-output Interprovincial Model Summary Results	1-19
Table 2.2-1. Life of Project.....	2-6
Table 2.3-1. Activities and Anticipated Schedule for Site Preparation Activities (Year -4).....	2-8
Table 2.3-2. Activities and Schedule for Site Preparation Activities (Year -3)	2-9
Table 2.3-3. Summary of Activities to be Granted Exemption and Exception from NIRB Review	2-11
Table 6.2-1. Size of Potential Development Areas and Footprint of Facilities	6-2
Table 6.3-1. Logistics and Site Access to Goose and George Properties.....	6-2
Table 6.3-2. Anticipated Number and Frequency of Flights for Each Phase of the Project.....	6-3
Table 6.3-3. Expected Number of Sealifts and Fuel Delivery for Each Project Phase.....	6-5
Table 6.4-1. Characteristics of the Infrastructure Constructed at the Marine Laydown Area	6-6
Table 6.4-2. Estimated Goods and Material Received at the Marine Laydown Area.....	6-8
Table 6.4-3. Proposed Bulk Fuel Storage Pooling Water Discharge Criteria	6-10
Table 6.4-4. Proposed Treated Sewage Effluent Discharge Quality Criteria.....	6-11
Table 6.5-1. Expected Annual Vehicle* Traffic on Winter Roads	6-12
Table 6.6-1. Characteristics of the Infrastructure Constructed at the Goose Property	6-15
Table 6.6-2. Proposed Oily Water Treatment Effluent Discharge Criteria	6-18
Table 6.6-3. Proposed Surface Runoff Water Quality Criteria.....	6-20
Table 6.6-4. Size of Fuel Storage and Expected Fuel Consumption	6-22

Table 6.6-5. Proposed Treated Sewage Effluent Discharge Quality Criteria	6-24
Table 6.6-6. Proposed Landfill Seepage/Groundwater Monitoring Water Quality Criteria	6-25
Table 6.6-7. Proposed Landfarm Pooling Water Quality Discharge Criteria	6-26
Table 6.6-8. Design Basis for the Tailing Impoundment Area.....	6-29
Table 6.6-9. Summary of Probabilistic Seismic Hazard Analysis	6-31
Table 6.6-10. Staged Embankment Volumes and Quantities (Approximation).....	6-32
Table 6.7-1. Characteristics of the Infrastructure Constructed at the George Property	6-36
Table 6.7-2. Proposed Oily Water Treatment Effluent Discharge Criteria	6-38
Table 6.7-3. Proposed Surface Runoff Water Quality Criteria.....	6-40
Table 6.7-4. Proposed Bulk Fuel Storage Pooling Water Discharge Criteria	6-41
Table 6.7-5. Proposed Treated Sewage Effluent Discharge Quality Criteria	6-43
Table 6.7-6. Proposed Landfarm Pooling Water Quality Discharge Criteria	6-45
Table 7.1-1. Back River Project Resource Estimates (March 2013).....	7-1
Table 7.1-2. Total Mineral Reserves for the Back River Property (as of May 1, 2013)	7-2
Table 7.1-3. Goose Property Mineralization Summary by Deposit	7-3
Table 7.1-4. George Property Mineralization Summary by Deposit.....	7-7
Table 7.2-1. Mine Schedule	7-16
Table 7.2-2. Pit Design Parameters	7-17
Table 7.2-3. Pit Slope Design Recommendations	7-18
Table 7.2-4. Waste Classification - All Areas	7-25
Table 7.2-5. Waste Lithology (as of January 2013).....	7-26
Table 7.3-1. Fleet Sizes for Open Pit Mining	7-29
Table 7.3-2. Underground Production and Development Equipment List	7-30
Table 7.10-1. Water Supply during Operation.....	7-39
Table 7.10-2. Drainage Pattern Alteration.....	7-43
Table 7.10-3. Drainage Pattern Alterations at George	7-46
Table 7.12-1. Summary of Goose Property Mine Operation.....	7-49
Table 7.13-1. Summary of George Property Mining Operation	7-51
Table 8.14-1. Proposed Reclamation Studies.....	8-10
Table 9.2-1. Monitoring and/or Mitigation Plans for the Back River Project	9-3

List of Appendices

Appendix V2-4A. Transportation Study

Appendix V2-4B. Metallurgical Assessment

Volume 3. Public Consultation, Government Engagement and Traditional Knowledge

Executive Summary	i
Table of Contents	xxiii
List of Figures	xxv
List of Tables	xxv
List of Plates	xxvi
List of Appendices	xxvi
Acronyms and Abbreviations	xxvii
1. Public Consultation and Engagement	1-1
1.1 Introduction	1-1
1.1.1 Conformity with EIS Guidelines	1-1
1.1.2 Purpose and Goals of Public Consultation and Engagement	1-1
1.2 Regulations and Requirements Pertaining to Public Consultation and Engagement for the Project	1-2
1.2.1 National and International Requirements	1-2
1.2.2 Regulatory Requirements in Nunavut	1-3
1.2.3 Corporate Commitments	1-4
1.3 Consultation and Engagement with Aboriginal Organizations	1-5
1.3.1 Inuit Organizations	1-5
1.3.1.1 Kitikmeot Inuit Association	1-5
1.3.1.2 Nunavut Tunngavik Incorporated	1-7
1.3.2 Northwest Territories Aboriginal Organizations	1-7
1.3.2.1 Akaitcho Dene First Nations	1-8
1.3.2.2 Tlicho Government	1-8
1.3.2.3 North Slave Métis Alliance	1-11
1.4 Consultation and Engagement with Potentially Affected Communities	1-12
1.4.1.1 Category 1 Communities	1-12
1.4.1.2 Category 2 Communities	1-17
1.4.1.3 Category 3 Communities	1-18
1.5 Sabina's Public Consultation and Engagement Program	1-19
1.5.1 Sabina's Commitment to Cultural Sensitivity and Inclusiveness	1-19
1.5.2 Types of Community Engagement	1-19
1.5.3 Consultation and Engagement Methods	1-21
1.5.3.1 Community and Stakeholder Meetings	1-21
1.5.3.2 Social Media and Distribution Materials	1-25
1.5.3.3 Other Forms of Outreach	1-27
1.5.3.4 Community Donations and Requests	1-32

1.6	Results of the Public Consultation and Engagement Program	1-33
1.6.1	Analyzing the Results of the Public Consultation Program.....	1-34
1.6.2	Role of Public Consultation and Engagement in Project Planning and Design	1-35
1.6.2.1	Baseline Data Collection.....	1-35
1.6.2.2	Impact Prediction	1-35
1.6.2.3	Significance Assessment	1-36
1.6.2.4	Development of Mitigation and Monitoring Programs	1-36
1.6.3	Key Issues Identified through Public Consultation and Engagement and Sabina's Commitments to Addressing these Issues	1-36
1.6.3.1	Community Benefits and Engagement.....	1-37
1.6.3.2	Employment and Training	1-38
1.6.3.3	Environmental Management and Monitoring	1-43
1.7	Community Involvement Plan Overview	1-44
2.	Government Engagement	2-1
2.1	Introduction	2-1
2.1.1	Purpose and Goals of Government Engagement	2-1
2.1.2	Relationship of Government Engagement to Lobbying	2-1
2.1.3	Relationship of Government Engagement to Community Engagement	2-1
2.1.4	Alignment of Government Engagement with Corporate Commitments.....	2-2
2.1.5	Sabina's Overarching Approach to Government Engagement	2-2
2.2	Federal and Territorial Agencies	2-2
2.2.1	Federal Agencies	2-2
2.2.1.1	Role of the Northern Projects Management Office	2-3
2.2.2	Government of Nunavut.....	2-4
2.2.3	Government of the Northwest Territories	2-4
2.3	Federal and Territorial Agency Engagement Program	2-4
2.3.1	General Approach	2-4
2.3.2	Government Engagement Methods	2-4
2.3.3	Distribution of Project Information and Materials.....	2-5
2.4	Outcomes of the Government Engagement Program.....	2-5
2.4.1	Overview of the Outcomes of the Government Engagement Program.....	2-5
2.4.1.1	List of Meetings with Government Agencies	2-6
3.	Traditional Knowledge.....	3-1
3.1	Introduction	3-1
3.1.1	Conformity with EIS Guidelines and Use of Traditional Knowledge in the DEIS	3-1
3.1.2	Definition and Description of Traditional Knowledge	3-1
3.1.3	Incorporating Inuit Qaujimajatuqangit Values into the Back River Project.....	3-2
3.2	Traditional Knowledge Sources	3-34
3.2.1	Naonaiyaotit Traditional Knowledge Project Database Report.....	3-34

3.2.2	Theme-based Traditional Knowledge Workshops	3-36
3.2.3	Report on Existing and Publically Available Traditional Knowledge from Selected Aboriginal Groups in the Northwest Territories	3-36
3.2.4	Public Consultation and Engagement Results	3-37
3.2.5	Other Relevant Sources	3-38
3.3	Role of Traditional Knowledge in Project Planning and Design	3-39
3.3.1	Baseline Data Collection	3-39
3.3.2	Impact Prediction	3-40
3.3.3	Significance Assessment.....	3-40
3.3.4	Development of Mitigation and Monitoring Programs.....	3-41
3.3.5	How Discrepancies Were Dealt With	3-42
References.....		R-1

List of Figures

FIGURE	PAGE
Figure 1.3-1. The Kitikmeot Region of Nunavut.....	1-6
Figure 1.3-2. Northwest Territories Land Information Related to Aboriginal Groups	1-9
Figure 1.4-1. Back River Project Location	1-14
Figure 1.4-2. Category 1, 2, and 3 Communities	1-15
Figure 1.5-1. Screenshot of Sabina's Project Website http://www.backriverproject.com	1-26
Figure 1.5-2. Example Back River Project Newsletter	1-28

List of Tables

TABLE	PAGE
Table 1.4-1. Distances from Nearby Communities to the Back River Project	1-13
Table 1.5-1. Types of Community Engagement Employed by Sabina.....	1-20
Table 1.5-2. Members of the Cambridge Bay Community Advisory Group 'Kiilinakmiut' (List Current as of November 2013).....	1-24
Table 1.5-3. Members of the Kugluktuk Community Advisory Group 'Kugluktumi Sabinakut Katimayit' (List Current as of November 2013)	1-25
Table 1.6-1. Summary of Key Issues Raised during Public Consultation and Sabina's Commitments to Addressing those Issues	1-39
Table 3.1-1. Uses of Traditional Knowledge in Sabina's Draft Environmental Impact Statement for the Back River Project	3-3
Table 3.1-2. Incorporation of Inuit Qaujimajatuqangit Values into the Back River Project	3-33

List of Plates

PLATE	PAGE
Plate 1.5-1. Selected photos from public meetings in the Kitikmeot Region, hosted by Sabina.	1-23
Plate 1.5-2. Sabina’s Cambridge Bay office, located at 4 Omingmak Street.	1-29

List of Appendices

Appendix V3-1A. Record of Meetings with Community and Stakeholder Groups
Appendix V3-1B. Record of Attempted Meetings with Community and Stakeholder Groups
Appendix V3-1C. Community and Stakeholder Group Meeting Minutes and Public Comment Forms
Appendix V3-1D. Terms of Reference for the Cambridge Bay and Kugluktuk Community Advisory Groups
Appendix V3-1E. Community Stakeholder Interviews for the Back River and Hackett River Projects: Participant Responses to Questions related to the Potential Development of the Projects
Appendix V3-1F. Record of Donations
Appendix V3-1G. Summary of Topics Raised during Public Consultation and Engagement
Appendix V3-2A. Record of Meetings with Government Officials
Appendix V3-3A. Inuit Traditional Knowledge of Sabina Gold & Silver Corp.’s Back River (Hannigayok) Project
Appendix V3-3B. Existing and Publically Available Traditional Knowledge from Aboriginal Groups in the Northwest Territories

Volume 4. Atmospheric Environment

Executive Summary	i
Table of Contents	xv
List of Figures	xviii
List of Tables	xix
List of Appendices	xx
Acronyms and Abbreviations	xxi
1. Air Quality	1-1
1.1 Existing Environment and Baseline Information	1-1
1.1.1 Methods and Data Sources	1-1
1.1.2 Results	1-5
1.1.2.1 Dustfall	1-5
1.1.2.2 Acid Deposition	1-5
1.1.2.3 Metal Deposition	1-5
1.1.2.4 PASS	1-8
1.1.2.5 CO, PM ₁₀ , PM _{2.5} , and TSP	1-10
1.1.3 Current Sources of CACs	1-10
1.1.4 Climatic Effects on Air Quality	1-10
1.2 Incorporation of Traditional Knowledge (TK)	1-10
1.2.1 Incorporation of TK for Existing Environment and Baseline Information	1-10
1.2.2 Incorporation of TK for VEC and VSEC Selection	1-11
1.3 Valued Components	1-11
1.3.1 Potential Valued Components and Scoping	1-11
1.3.2 Valued Components Included in Assessment	1-11
1.4 Spatial and Temporal Boundaries	1-12
1.4.1 Spatial Boundaries	1-12
1.4.1.1 Local Study Area	1-12
1.4.1.2 Regional Study Area	1-12
1.4.2 Temporal Boundaries	1-12
1.5 Potential Project-related Effects Assessment	1-15
1.5.1 Methodology Overview	1-15
1.5.2 Potential Interactions with Project and Characterization	1-19
1.5.2.1 Potential Effects on Indicators by Project Phase	1-20
1.5.2.2 Characterization of Potential Effects	1-21
1.5.3 Identification of Mitigation and Management Measures	1-25
1.5.4 Characterization of Residual Effects	1-26
1.5.5 Significance of Residual Effects	1-26
1.6 Potential Cumulative Effects Assessment	1-28

1.6.1	Methodology Overview	1-28
1.6.1.1	Spatial Boundary	1-28
1.6.1.2	Temporal Boundary	1-28
1.6.2	Potential Interactions of Residual Effects with Other Projects	1-28
1.7	Transboundary Effects	1-29
1.8	Mitigation and Adaptive Management	1-29
1.8.1.1	Mitigation by Project Design	1-29
1.8.1.2	Best Management Practices	1-29
1.8.1.3	Adaptive Management	1-30
1.8.1.4	Monitoring	1-30
1.9	Proposed Monitoring Programs	1-30
1.9.1	Air Quality Monitoring and Management Plan	1-30
1.10	Impact Statement	1-30
2.	Noise and Vibration	2-1
2.1	Existing Environment and Baseline Information	2-1
2.1.1	Methodology	2-1
2.1.2	Results	2-2
2.2	Incorporation of Traditional Knowledge (TK)	2-6
2.2.1	Incorporation of TK for Existing Environment and Baseline Information	2-6
2.2.2	Incorporation of TK for VEC and VSEC	2-6
2.3	Valued Components	2-7
2.3.1	Potential Valued Components and Scoping	2-7
2.3.2	Valued Components Included in Assessment	2-7
2.4	Spatial and Temporal Boundaries	2-8
2.4.1	Spatial Boundaries	2-8
2.4.1.1	Local Study Area	2-8
2.4.1.2	Regional Study Area	2-8
2.4.2	Temporal Boundaries	2-8
2.5	Potential Project-related Effects Assessment	2-11
2.5.1	Methodology Overview	2-11
2.5.2	Potential Interactions with Project and Characterization	2-13
2.5.2.1	Overview by Project Phase	2-13
2.5.2.2	Potential Effects on Indicators	2-15
2.5.2.3	Characterization of Potential Effects	2-16
2.5.3	Identification of Mitigation and Management Measures	2-28
2.5.3.1	Site Preparation and Construction	2-31
2.5.3.2	Operation	2-31
2.5.3.3	Reclamation and Closure	2-31
2.5.3.4	Checking and Corrective Action	2-31
2.5.4	Characterization of Residual Effects	2-32
2.5.4.1	Sleep Disturbance (Humans)	2-32

	2.5.4.2	Disturbance (Wildlife).....	2-32
	2.5.4.3	Habitat Loss (Wildlife)	2-32
	2.5.5	Significance of Residual Effects.....	2-33
2.6		Potential Cumulative Effects Assessment	2-33
	2.6.1	Methodology Overview	2-33
	2.6.1.1	Spatial Boundary	2-35
	2.6.1.2	Temporal Boundary	2-35
	2.6.2	Potential Interactions of Residual Effects with Other Projects	2-35
2.7		Transboundary Effects	2-35
2.8		Mitigation and Adaptive Management	2-35
	2.8.1	Mitigation by Design	2-35
	2.8.2	Best Management Practices	2-36
	2.8.3	Adaptive Management	2-36
	2.8.4	Monitoring	2-36
2.9		Proposed Monitoring Programs	2-36
2.10		Impact Statement	2-37
3.		Climate and Meteorology	3-1
3.1		Existing Environment and Baseline Information	3-1
	3.1.1	Climate	3-1
	3.1.1.1	Current Climate	3-1
	3.1.1.2	Greenhouse Gas Emissions	3-1
	3.1.1.3	Future Climate Trends	3-1
	3.1.2	Meteorology	3-2
	3.1.2.1	Methods and Data Sources.....	3-2
	3.1.2.2	Results	3-4
3.2		Incorporation of Traditional Knowledge (TK).....	3-16
	3.2.1	Incorporation of TK for Existing Environment and Baseline Information	3-16
	3.2.2	Incorporation of TK for VEC and VSEC Selection.....	3-17
	3.2.3	Incorporation of TK for Spatial and Temporal Boundaries	3-17
	3.2.4	Incorporation of TK for Effects Assessment.....	3-17
	3.2.5	Incorporation of TK for Mitigation and Adaptive Management	3-17
3.3		Valued Components	3-17
	3.3.1	Potential Valued Components and Scoping	3-17
	3.3.2	Valued Components Included in Assessment	3-17
3.4		Supporting and Supplemental Information.....	3-18
	3.4.1	Climate Change	3-18
	3.4.1.1	Past Climate Change in the Project Region	3-18
	3.4.1.2	Climate Change Projections for the Project Region	3-18
	3.4.2	Effects Assessment	3-25
	3.4.2.1	Climate Change	3-25
	3.4.2.2	GHG	3-26

3.4.3	Mitigation and Monitoring	3-29
3.4.3.1	Mitigation by Project Design	3-29
3.4.3.2	Best Management Practices	3-30
3.4.3.3	Monitoring	3-30
3.4.3.4	Adaptive Management	3-30
References		R-1

List of Figures

FIGURE	PAGE
Figure 1.1-1. Baseline Dustfall, Particulate, and Passive Air Quality (SO ₂ , NO ₂ and O ₃) Stations.....	1-3
Figure 1.1-2. Dustfall Results, 2011 and 2012	1-6
Figure 1.1-3. Acid Deposition Results, 2011 and 2012	1-7
Figure 1.1-4. Monthly Ambient Concentrations of NO ₂ , SO ₂ and O ₃ Collected by PASS, 2011 and 2012	1-9
Figure 1.4-1. Local Study Area and Regional Study Area for Air Quality	1-13
Figure 2.1-1. 2012 Noise Baseline Monitoring Locations, Back River Project	2-3
Figure 2.1-2. 24-Hour Logarithmic Average L ₉₀	2-5
Figure 2.4-1. Local Study Area and Regional Study Area for Noise and Vibration	2-9
Figure 2.5-1. Noise Sensitive Receptors: George Property Area	2-17
Figure 2.5-2. Noise Sensitive Receptors: Goose Property Area.....	2-18
Figure 2.5-3. Predicted Night-time Noise (L _n) – Mining Operations, George Property Area	2-22
Figure 2.5-4. Predicted Night-time Noise (L _n) – Mining Operations, Goose Property Area	2-23
Figure 2.5-5. Predicted Noise Levels (L _{AE}) – Fixed Wing Aircraft, George Property Area	2-24
Figure 2.5-6. Predicted Noise Levels (L _{AE}) – Fixed Wing Aircraft, Goose Property Area	2-25
Figure 2.5-7. Predicted Noise Levels (L _{AE}) – Helicopters, George Property Area.....	2-26
Figure 2.5-8. Predicted Noise Levels (L _{AE}) – Helicopters, Goose Property Area	2-27
Figure 2.5-9. Predicted Noise Levels (L _{peak}) – Blasting, George Property Area	2-29
Figure 2.5-10. Predicted Noise Levels (L _{peak}) – Blasting, Goose Property Area	2-30
Figure 3.1-1. Locations of the Project Site-specific Meteorological Stations and Environment Canada Meteorological Stations	3-3
Figure 3.1-2. Local and Regional Stations Average Daily Air Temperatures, 2006 to 2012.....	3-6
Figure 3.1-3. Local and Regional Stations Average Daily Precipitation, 2006 to 2012	3-8
Figure 3.1-4. George Meteorological Station Wind Roses, 2006 to 2012.....	3-9
Figure 3.1-5. Goose Meteorological Station Wind Roses, 2006 to 2012	3-10

Figure 3.1-6. BIPR Meteorological Station Wind Roses, 2006 to 2012	3-11
Figure 3.1-7. George Meteorological Station Average Daily Solar Radiation, 2006 to 2012	3-13
Figure 3.1-8. Goose Meteorological Station Average Daily Solar Radiation, 2006 to 2012	3-14
Figure 3.1-9. BIPR Meteorological Station Average Daily Solar Radiation, 2006 to 2012	3-15
Figure 3.4-1. Predicted Annual Mean, Daily Mean Maximum, and Daily Mean Minimum Temperature Change	3-23
Figure 3.4-2. Predicted Annual Mean Precipitation	3-24

List of Tables

TABLE	PAGE
Table 1.1-1. Maximum Metal Deposition from All Dustfall Stations, 2011 and 2012.....	1-8
Table 1.3-1. Identification and Rationale for Selecting Air Quality as a Valued Component	1-11
Table 1.5-1. Air Contaminants included in the Air Quality Modelling Study	1-16
Table 1.5-2. Federal, Provincial, and Territorial Ambient Air Quality Standards and Objectives	1-18
Table 1.5-3. Definitions of the Magnitude Ratings for Residual Effects	1-18
Table 1.5-4. Definitions of Significance Ratings for Air Quality	1-19
Table 1.5-5. Potential Project Interaction with the VEC Air Quality.....	1-19
Table 1.5-6. Predicted Maximum Air Contaminants Resulting from Project	1-22
Table 1.5-7. TSP, PM ₁₀ and PM _{2.5} Fugitive and Non-Fugitive Sources.....	1-24
Table 1.5-8. Summary of Residual Effects and Overall Significance Rating for Air Quality	1-27
Table 2.1-1. Summary of 24-Hour Logarithmic Average L ₉₀ Noise Levels	2-6
Table 2.3-1. Identification and Rationale for Selecting Noise and Vibration as a VEC.....	2-7
Table 2.5-1. Definitions of Magnitude Ratings for Noise and Vibration Residual Effects	2-13
Table 2.5-2. Definitions of Significance Ratings for Noise and Vibration Residual Effects	2-13
Table 2.5-3. Potential Project Interactions with the VEC Noise and Vibration.....	2-14
Table 2.5-4. Project-specific Assessment Locations — George Property Area (Sensitive Receptors) ..	2-16
Table 2.5-5. Project-specific Assessment Locations — Goose Property Area (Sensitive Receptors) ...	2-19
Table 2.5-6. Project Noise Indicators and Relevant Criteria	2-19
Table 2.5-7. Predicted Noise Levels of Mining Construction and Operations at Human Receptors (dBA).....	2-20
Table 2.5-8. Predicted Aviation Noise Levels at Human Receptors (dBA).....	2-20
Table 2.5-9. Blasting Noise Levels: Human Receptors	2-20

Table 2.5-10. Predicted Noise Levels from Mining Construction and Operations at Wildlife Receptors (dBA).....	2-21
Table 2.5-11. Predicted Aviation Noise Levels at Wildlife Receptors (dBA)	2-28
Table 2.5-12. Summary of Residual Effects and Overall Significance Rating for Noise	2-34
Table 3.1-1. Measured and Climate Normal Temperature (°C).....	3-5
Table 3.4-1. Measured Climate Normals and GCM-predicted Climate Baseline for the Project Area .	3-21
Table 3.4-2. Summary of Climate Forecasts	3-22
Table 3.4-3. Emission Factors and Global Warming Potential of Diesel Fuel	3-27
Table 3.4-4. Total GHG Emissions from Diesel Fuel (tonnes CO ₂ eq)	3-27
Table 3.4-5. Total GHG Emissions from Aircraft	3-28
Table 3.4-6. Total GHG Emissions from Shipping	3-28
Table 3.4-7. Summary of Project-related GHG Emissions	3-28
Table 3.4-8. Summary of Other Mines GHG Emissions	3-29
Table 3.4-9. Comparison on a Regional, National and Global Scale	3-29

List of Appendices

Appendix V4-1A. Back River Project: 2011 to 2012 Air Quality Baseline Report
Appendix V4-1B. Air Quality Modelling Report
Appendix V4-2A. Back River Project: 2012 Noise Baseline Report
Appendix V4-2B. Noise and Vibration Modelling Report
Appendix V4-3A. Back River Project: 2006 to 2012 Meteorological Baseline Report
Appendix V4-3B. Climate Change Predictions - Model Variation

Volume 5. Terrestrial Environment

Executive Summary	i
Table of Contents	xxvii
List of Figures	xliv
List of Tables	xlvi
List of Appendices	liii
Acronyms and Abbreviations	lv
1. Geology.....	1-1
1.1 Existing Environment and Baseline Information	1-1
1.1.1 Regional Setting	1-1
1.1.1.1 Bedrock Geology	1-1
1.1.1.2 Quaternary Geology	1-1
1.1.2 Local Setting	1-4
1.1.2.1 Lithological Units	1-4
1.1.2.2 Structural Geology.....	1-6
1.1.2.3 Quaternary Geology	1-6
1.1.2.4 Goose Property Geology	1-6
1.1.2.5 George Property Geology.....	1-10
1.1.3 Summary	1-12
1.2 Incorporation of Traditional Knowledge (TK).....	1-12
1.2.1 Incorporation of TK for Existing Environment and Baseline Information	1-12
1.2.2 Incorporation of TK for VEC and VSEC Selection.....	1-13
1.2.3 Incorporation of TK for Spatial and Temporal Boundaries	1-13
1.2.4 Incorporation of TK for Mitigation and Adaptive Management	1-13
1.3 Valued Components	1-13
1.3.1 Potential Valued Components and Scoping	1-13
1.3.2 Valued Components Included in Assessment	1-13
1.4 Supporting and Supplemental Information.....	1-13
2. Permafrost.....	2-1
2.1 Existing Environment and Baseline Information	2-1
2.1.1 Regional Setting	2-1
2.1.2 Local Setting	2-5
2.1.2.1 Field and Analytical Methods	2-5
2.1.2.2 Goose Property Area	2-16
2.1.2.3 George Property Area	2-20
2.1.2.4 Marine Laydown Area and Winter Road Corridors.....	2-23
2.1.2.5 Impacts of Climate Change on Permafrost Conditions	2-27

2.2	Incorporation of Traditional Knowledge (TK).....	2-27
2.2.1	Incorporation of TK for Existing Environment and Baseline Information	2-28
2.2.2	Incorporation of TK for Spatial and Temporal Boundaries	2-28
2.2.3	Incorporation of TK for Mitigation and Adaptive Management	2-28
2.3	Valued Components	2-28
2.3.1	Potential Valued Components and Scoping	2-28
2.3.2	Valued Components Included in Assessment	2-28
2.4	Supporting and Supplemental Information.....	2-28
2.4.1	Interaction of Permafrost with the Project.....	2-28
3.	Landforms and Soils	3-1
3.1	Existing Environment and Baseline Information	3-1
3.1.1	Regional Overview.....	3-1
3.1.1.1	Topography.....	3-1
3.1.1.2	Surficial Deposits.....	3-2
3.1.1.3	Soils	3-5
3.1.2	Baseline Study Methods	3-5
3.1.3	Characterization of Local Baseline Conditions	3-6
3.1.3.1	Goose Property Local Study Area	3-6
3.1.3.2	George Property Local Study Area	3-10
3.1.3.3	Marine Laydown Area Local Study Area	3-15
3.1.3.4	Winter Access Road Local Study Area	3-16
3.1.3.5	Mineral Soil Chemistry in the Project LSA	3-16
3.2	Incorporation of Traditional Knowledge (TK).....	3-21
3.2.1	Incorporation of TK for Existing Environment and Baseline Information	3-21
3.2.2	Incorporation of TK for Valued Environmental Component Selection.....	3-22
3.3	Valued Components	3-33
3.3.1	Potential Valued Components and Scoping	3-33
3.3.2	Valued Components Included in Assessment	3-33
3.4	Supporting and Supplemental Information.....	3-33
3.4.1.1	Potential for Soil Erosion Associated with the Project Components and Activities	3-33
3.4.1.2	Potential Impacts to Soil Quality from Compaction	3-34
3.4.1.3	Implications to the Project Design Related to Terrain Conditions, in Particular Permafrost, Sensitive Landforms, High Ice-content Soils, Ice Lenses, Thaw-sensitive Slopes, and Talik Zones.	3-34
3.4.1.4	Potential Impacts on the Thermal Stability of Terrain in the Vicinity of Facilities and Infrastructure due to the Thawing of the Ice-rich Permafrost Soils and Other Sensitive Landforms.....	3-35
4.	Vegetation and Special Landscape Features.....	4-1
4.1	Existing Environment and Baseline Information	4-1
4.2	Incorporation of Traditional Knowledge (TK).....	4-17

4.2.1	Incorporation of TK for Existing Environment and Baseline Information	4-18
4.2.2	Incorporation of TK for VEC and VSEC Selection.....	4-18
4.2.3	Incorporation of TK for Spatial and Temporal Boundaries	4-18
4.2.4	Incorporation of TK for Mitigation and Adaptive Management	4-19
4.3	Valued Components	4-19
4.3.1	Potential Valued Components and Scoping	4-19
4.3.2	Valued Components Included in Assessment	4-21
4.3.2.1	Vegetation	4-21
4.3.2.2	Special Landscape Features.....	4-22
4.3.3	Supporting and Supplemental Information.....	4-25
4.4	Spatial and Temporal Boundaries.....	4-25
4.4.1	Spatial Boundaries.....	4-26
4.4.1.1	Local Study Area	4-26
4.4.1.2	Regional Study Area	4-26
4.4.2	Temporal Boundaries	4-26
4.5	Potential Project-related Effects Assessment.....	4-26
4.5.1	Methodology Overview	4-26
4.5.2	Potential Interactions with Project and Characterization	4-28
4.5.2.1	Loss of Vegetation and Special Landscape Features.....	4-29
4.5.2.2	Degradation of Vegetation	4-29
4.5.3	Identification of Mitigation and Management Measures	4-31
4.5.3.1	Mitigation for Loss of Vegetation and Special Landscape Features	4-31
4.5.3.2	Mitigation for Degradation of Vegetation.....	4-32
4.5.3.3	Adaptive Management	4-33
4.5.3.4	Monitoring.....	4-33
4.5.4	Characterization of Residual Effects.....	4-33
4.5.4.1	Loss of Vegetation and Special Landscape Features.....	4-33
4.5.4.2	Degradation of Vegetation	4-60
4.5.5	Significance of Residual Effects.....	4-60
4.6	Potential Cumulative Effects Assessment.....	4-62
4.6.1	Methodology Overview	4-63
4.6.2	Potential Interactions with Project and Characterization	4-63
4.6.3	Identification of Mitigation and Management Measures	4-65
4.6.4	Characterization of Cumulative Residual Effects.....	4-65
4.6.5	Significance of Cumulative Residual Effects.....	4-66
4.7	Transboundary Effects.....	4-68
4.8	Mitigation and Adaptive Management	4-68
4.8.1	Mitigation by Project Design	4-68
4.8.2	Best Management Practices	4-68
4.8.3	Adaptive Management and Monitoring.....	4-69

4.8.4	Summary Table of Mitigation and Adaptive Management Measures	4-69
4.9	Impact Statement	4-70
4.10	Supporting and Supplemental Information.....	4-71
5.	Caribou	5-1
5.1	Existing Environment and Baseline Information	5-1
5.1.1	Introduction	5-1
5.1.2	Bathurst Caribou.....	5-3
5.1.2.1	Introduction.....	5-3
5.1.2.2	Distribution and Migration Patterns	5-3
5.1.2.3	Population Trends and Conservation	5-17
5.1.2.4	Habitat Use and Diet	5-18
5.1.2.5	Baseline Data for Bathurst Caribou Herd	5-21
5.1.3	Beverly Caribou	5-50
5.1.3.1	Introduction.....	5-50
5.1.3.2	Distribution and Migration Patterns	5-50
5.1.3.3	Population Trends and Conservation	5-59
5.1.3.4	Habitat Use and Diet	5-59
5.1.3.5	Baseline Data for Beverly Caribou Herd	5-60
5.1.4	Dolphin and Union Caribou	5-62
5.1.4.1	Introduction.....	5-62
5.1.4.2	Distribution and Migration Patterns	5-62
5.1.4.3	Population Trends and Conservation	5-66
5.1.4.4	Baseline Data for the Dolphin and Union Caribou Herd	5-73
5.2	Incorporation of Traditional Knowledge (TK).....	5-74
5.2.1	Incorporation of TK for Existing Environment and Baseline Information	5-76
5.2.2	Incorporation of TK for VEC and VSEC Selection.....	5-76
5.2.3	Incorporation of TK for Spatial and Temporal Boundaries	5-76
5.2.4	Incorporation of TK for Effects Assessment.....	5-77
5.2.5	Incorporation of TK for Mitigation and Adaptive Management.....	5-77
5.3	Valued Components	5-77
5.3.1	Potential Valued Components and Scoping	5-77
5.3.2	Valued Components Included in Assessment	5-78
5.4	Spatial and Temporal Boundaries.....	5-80
5.4.1	Spatial Boundaries.....	5-80
5.4.1.1	Local Study Area	5-80
5.4.1.2	Regional Study Area	5-80
5.4.2	Temporal Boundaries	5-80
5.5	Project Effects Assessment	5-83
5.5.1	Methodology Overview	5-83
5.5.1.1	Indicators Used to Characterize Potential Residual Effects	5-83
5.5.1.2	Magnitude Ratings for Residual Effects	5-84

	5.5.1.3	Overall Significance Ratings of Residual Effects	5-84
5.5.2		Potential Interactions with Project and Characterization	5-85
	5.5.2.1	Habitat Loss	5-88
	5.5.2.2	Disturbance due to Noise	5-93
	5.5.2.3	Disruption to Movement	5-101
	5.5.2.4	Direct Mortality and Injury	5-104
	5.5.2.5	Indirect Mortality	5-105
	5.5.2.6	Attraction	5-106
	5.5.2.7	Exposure to Contaminants.....	5-107
	5.5.2.8	Reduction in Reproductive Productivity	5-107
5.5.3		Identification of Mitigation and Management Measures	5-108
	5.5.3.1	Mitigation for Habitat Loss	5-108
	5.5.3.2	Mitigation for Disturbance.....	5-109
	5.5.3.3	Mitigation for Disruption to Movement.....	5-110
	5.5.3.4	Mitigation for Direct Mortality and Injury	5-110
	5.5.3.5	Mitigation for Indirect Mortality.....	5-110
	5.5.3.6	Mitigation for Attraction.....	5-111
	5.5.3.7	Mitigation for Exposure to Contaminants	5-111
5.5.4		Characterization of Residual Effects.....	5-112
	5.5.4.1	Habitat Loss	5-112
	5.5.4.2	Disturbance	5-113
	5.5.4.3	Reduction in Reproductive Productivity	5-113
5.5.5		Significance of Residual Effects.....	5-114
5.6		Potential Cumulative Effects Assessment	5-114
	5.6.1	Methodology Overview of Cumulative Effects.....	5-114
	5.6.1.1	Spatial Boundary	5-116
	5.6.1.2	Temporal Boundary.....	5-119
	5.6.2	Potential Interactions of Residual Effects with Other Projects	5-119
	5.6.2.1	Habitat Loss.....	5-123
	5.6.2.2	Disturbance	5-129
	5.6.2.3	Reduction in Reproductive Productivity	5-143
	5.6.3	Identification of Mitigation and Management Measures	5-145
	5.6.4	Characterization of Cumulative Effect	5-145
	5.6.4.1	Habitat Loss.....	5-145
	5.6.4.2	Disturbance due to Noise	5-145
	5.6.4.3	Reduction in Reproductive Productivity	5-146
	5.6.5	Significance of Cumulative Residual Effects.....	5-147
5.7		Transboundary Effects.....	5-147
5.8		Mitigation and Adaptive Management	5-147
	5.8.1	Mitigation by Project Design	5-149
	5.8.2	Best Management Practices	5-149

5.8.3	Adaptive Management	5-150
5.8.4	Monitoring	5-150
5.8.5	Summary Table of Mitigation and Adaptive Management Measures	5-150
5.9	Proposed Monitoring Programs	5-153
5.9.1	Wildlife Mitigation and Monitoring Plan	5-153
5.9.1.1	Facility-specific Monitoring	5-153
5.9.1.2	Focal-species Monitoring	5-154
5.10	Impact Statement	5-155
6.	Grizzly Bear	6-1
6.1	Existing Environment and Baseline Information	6-1
6.1.1	Introduction	6-1
6.1.2	Population Trends and Conservation.....	6-1
6.1.3	Distribution and Movement Patterns.....	6-3
6.1.4	Habitat Use and Diet.....	6-3
6.1.5	Baseline Data for Grizzly Bears	6-8
6.1.5.1	Methods	6-9
6.1.5.2	Results	6-13
6.2	Incorporation of Traditional Knowledge (TK).....	6-20
6.2.1	Incorporation of TK for Existing Environment and Baseline Information	6-29
6.2.2	Incorporation of TK for VEC and VSEC Selection.....	6-29
6.2.3	Incorporation of TK for Spatial and Temporal Boundaries	6-29
6.2.4	Incorporation of TK for Effects Assessment.....	6-29
6.2.5	Incorporation of TK for Mitigation and Adaptive Management.....	6-30
6.3	Valued Components	6-30
6.3.1	Potential Valued Components and Scoping	6-30
6.3.2	Valued Components Included in Assessment	6-31
6.4	Spatial and Temporal Boundaries.....	6-32
6.4.1	Spatial Boundaries.....	6-32
6.4.1.1	Local Study Area	6-32
6.4.1.2	Regional Study Area	6-32
6.4.2	Temporal Boundaries	6-32
6.5	Project Effects Assessment	6-35
6.5.1	Methodology Overview	6-35
6.5.1.1	Indicators Used to Characterize Potential Effects	6-35
6.5.1.2	Magnitude Ratings for Residual Effects	6-36
6.5.1.3	Overall Significance Ratings for Residual Effects	6-36
6.5.2	Potential Interactions with Project and Characterization	6-37
6.5.2.1	Habitat Loss.....	6-41
6.5.2.2	Disturbance due to Noise	6-44
6.5.2.3	Disruption to Movement	6-52
6.5.2.4	Direct Mortality and Injury	6-53

	6.5.2.5	Indirect Mortality	6-54
	6.5.2.6	Attraction	6-54
	6.5.2.7	Exposure to Contaminants.....	6-55
	6.5.2.8	Reduction in Reproductive Productivity	6-55
6.5.3		Identification of Mitigation and Management Measures	6-56
	6.5.3.1	Mitigation for Habitat Loss	6-56
	6.5.3.2	Mitigation for Disturbance due to Noise	6-57
	6.5.3.3	Mitigation for Disruption to Movement.....	6-57
	6.5.3.4	Mitigation for Direct Mortality and Injury	6-57
	6.5.3.5	Mitigation for Indirect Mortality.....	6-58
	6.5.3.6	Mitigation for Attraction.....	6-58
	6.5.3.7	Mitigation for Exposure to Contaminants	6-59
6.5.4		Characterization of Residual Effects.....	6-59
	6.5.4.1	Habitat Loss	6-60
	6.5.4.2	Disturbance due to Noise	6-60
	6.5.4.3	Attraction	6-60
	6.5.4.4	Reduction in Reproductive Productivity	6-61
6.5.5		Significance of Residual Effects.....	6-61
6.6		Potential Cumulative Effects Assessment	6-62
	6.6.1	Methodology Overview of Cumulative Effects.....	6-62
	6.6.1.1	Spatial Boundary	6-64
	6.6.1.2	Temporal Boundary.....	6-64
	6.6.2	Potential Interactions of Residual Effects with Other Projects	6-64
	6.6.2.1	Habitat Loss	6-67
	6.6.2.2	Disturbance due to Noise	6-68
	6.6.2.3	Attractants	6-73
	6.6.2.4	Reduction of Reproductive Productivity	6-73
6.6.3		Identification of Mitigation and Management Measures	6-74
6.6.4		Characterization of Cumulative Residual Effects.....	6-74
	6.6.4.1	Habitat Loss	6-74
	6.6.4.2	Disturbance due to Noise	6-74
	6.6.4.3	Attractants	6-75
	6.6.4.4	Reduction in Reproductive Productivity	6-75
6.6.5		Significance of Cumulative Residual Effects.....	6-76
6.7		Transboundary Effects.....	6-76
6.8		Mitigation and Adaptive Management	6-76
	6.8.1	Mitigation by Project Design	6-78
	6.8.2	Best Management Practices	6-78
	6.8.3	Adaptive Management	6-78
	6.8.4	Monitoring	6-79
	6.8.5	Summary Table of Mitigation and Adaptive Management Measures.....	6-79

6.9	Proposed Monitoring Programs	6-81
6.9.1	Wildlife Mitigation and Monitoring Plan	6-82
6.9.1.1	Facility-specific Monitoring	6-82
6.9.1.2	Focal-species Monitoring	6-83
6.10	Impact Statement	6-83
7.	Muskox.....	7-1
7.1	Existing Environment and Baseline Information	7-1
7.1.1	Introduction	7-1
7.1.2	Population Trends and Conservation.....	7-1
7.1.3	Distribution and Migration Patterns.....	7-2
7.1.4	Habitat Use and Diet.....	7-3
7.1.5	Baseline Data for Muskox	7-3
7.1.5.1	Aerial Surveys.....	7-4
7.1.5.2	Habitat Suitability Ratings	7-7
7.2	Incorporation of Traditional Knowledge (TK).....	7-13
7.2.1	Incorporation of TK for Existing Environment and Baseline Information	7-13
7.2.2	Incorporation of TK for VEC and VSEC Selection.....	7-13
7.2.3	Incorporation of TK for Spatial and Temporal Boundaries	7-14
7.2.4	Incorporation of TK for Effects Assessment.....	7-14
7.2.5	Incorporation of TK for Mitigation and Adaptive Management	7-14
7.3	Valued Components	7-15
7.3.1	Potential Valued Components and Scoping	7-15
7.3.2	Valued Components included in Assessment	7-15
7.4	Spatial and Temporal Boundaries.....	7-16
7.4.1	Spatial Boundaries.....	7-16
7.4.1.1	Local Study Area	7-16
7.4.1.2	Regional Study Area	7-16
7.4.2	Temporal Boundaries	7-16
7.5	Project-related Effects Assessment	7-19
7.5.1	Methodology Overview	7-19
7.5.1.1	Indicators Used to Characterize Potential Effects	7-19
7.5.1.2	Magnitude Ratings for Residual Effects	7-20
7.5.1.3	Overall Significance Ratings for Residual Effects	7-20
7.5.2	Potential Interactions with Project and Characterization	7-21
7.5.2.1	Habitat Loss.....	7-24
7.5.2.2	Disturbance due to Noise	7-28
7.5.2.3	Disruption of Movement	7-37
7.5.2.4	Direct Mortality and Injury	7-38
7.5.2.5	Indirect Mortality	7-39
7.5.2.6	Attraction	7-39
7.5.2.7	Exposure to Contaminants.....	7-39

	7.5.2.8	Reduction in Reproductive Productivity	7-39
7.5.3		Identification of Mitigation and Management Measures	7-40
	7.5.3.1	Mitigation for Habitat Loss	7-40
	7.5.3.2	Mitigation for Disturbance due to Noise	7-41
	7.5.3.3	Mitigation for Disruption of Movement.....	7-41
	7.5.3.4	Mitigation for Direct Mortality and Injury	7-41
	7.5.3.5	Mitigation for Indirect Mortality.....	7-42
	7.5.3.6	Mitigation for Attraction.....	7-42
	7.5.3.7	Mitigation for Exposure to Contaminants	7-42
7.5.4		Characterization of Residual Effects.....	7-43
	7.5.4.1	Habitat Loss	7-43
	7.5.4.2	Disturbance due to Noise	7-44
	7.5.4.3	Reduction in Reproductive Productivity	7-44
7.5.5		Significance of Residual Effects.....	7-45
7.6		Potential Cumulative Effects Assessment	7-45
	7.6.1	Methodology Overview of Cumulative Effects.....	7-45
	7.6.1.1	Spatial Boundaries for the Cumulative Effects Assessment	7-47
	7.6.1.2	Temporal Boundaries for Cumulative Effects Assessment	7-47
	7.6.2	Potential Interactions of Residual Effects with Other Projects	7-48
	7.6.2.1	Habitat Loss	7-48
	7.6.2.2	Disturbance due to Noise	7-53
	7.6.2.3	Reduction in Reproductive Productivity	7-57
	7.6.3	Identification of Mitigation and Management Measures	7-57
	7.6.4	Characterization of Cumulative Residual Effects.....	7-57
	7.6.4.1	Habitat Loss	7-57
	7.6.4.2	Disturbance due to Noise	7-58
	7.6.4.3	Reduction in Reproductive Productivity	7-58
	7.6.5	Significance of Cumulative Residual Effects.....	7-59
7.7		Transboundary Effects.....	7-61
7.8		Mitigation and Adaptive Management	7-61
	7.8.1	Mitigation by Project Design	7-62
	7.8.2	Best Management Practices	7-62
	7.8.3	Adaptive Management	7-62
	7.8.4	Monitoring	7-63
	7.8.5	Summary Table of Mitigation and Adaptive Management Measures.....	7-63
7.9		Proposed Monitoring Programs	7-65
	7.9.1	Wildlife Mitigation and Monitoring Plan	7-65
	7.9.1.1	Facility-specific Monitoring	7-65
	7.9.1.2	Focal-species Monitoring	7-66
7.10		Impact Statement	7-66

8.	Wolverine and Furbearers	8-1
8.1	Existing Environment and Baseline Information	8-1
8.1.1	Introduction	8-1
8.1.2	Population Trends and Conservation.....	8-1
8.1.3	Distribution and Migration Patterns.....	8-5
8.1.4	Habitat Use and Diet.....	8-6
8.1.5	Baseline Data for Furbearers	8-8
8.1.5.1	Methods	8-9
8.1.5.2	Results	8-11
8.2	Incorporation of Traditional Knowledge (TK).....	8-23
8.2.1	Incorporation of TK for Existing Environment and Baseline Information	8-24
8.2.2	Incorporation of TK for VEC and VSEC Selection.....	8-27
8.2.3	Incorporation of TK for Spatial and Temporal Boundaries	8-27
8.2.4	Incorporation of TK for Effects Assessment.....	8-27
8.2.5	Incorporation of TK for Mitigation and Adaptive Management.....	8-27
8.3	Valued Components	8-28
8.3.1	Potential Valued Components and Scoping	8-28
8.3.2	Valued Components included in Assessment	8-28
8.4	Spatial and Temporal Boundaries.....	8-29
8.4.1	Spatial Boundaries.....	8-29
8.4.1.1	Local Study Area	8-29
8.4.1.2	Regional Study Area	8-29
8.4.2	Temporal Boundaries	8-29
8.5	Project-related Effects Assessment	8-30
8.5.1	Methodology Overview	8-30
8.5.1.1	Indicators used to Characterize Potential Residual Effects	8-30
8.5.1.2	Magnitude Ratings for Residual Effects	8-33
8.5.1.3	Overall Significance Ratings of Residual Effects	8-34
8.5.2	Potential Interactions with Project and Characterization	8-34
8.5.2.1	Habitat Loss.....	8-37
8.5.2.2	Disturbance due to Noise	8-41
8.5.2.3	Disruption to Movement	8-53
8.5.2.4	Direct Mortality and Injury	8-55
8.5.2.5	Indirect Mortality	8-56
8.5.2.6	Attraction	8-56
8.5.2.7	Exposure to Contaminants.....	8-57
8.5.2.8	Reduction in Reproductive Productivity	8-57
8.5.3	Identification of Mitigation and Management Measures	8-58
8.5.3.1	Mitigation for Habitat Loss	8-58
8.5.3.2	Mitigation for Disturbance due to Noise	8-59
8.5.3.3	Mitigation for Disruption to Movement.....	8-59

	8.5.3.4	Mitigation for Direct Mortality and Injury	8-60
	8.5.3.5	Mitigation for Indirect Mortality.....	8-60
	8.5.3.6	Mitigation for Attraction.....	8-60
	8.5.3.7	Mitigation for Exposure to Contaminants	8-61
	8.5.4	Characterization of Residual Effects.....	8-62
	8.5.4.1	Habitat Loss	8-62
	8.5.4.2	Disturbance due to Noise	8-63
	8.5.4.3	Attraction	8-64
	8.5.4.4	Reduction in Reproductive Productivity	8-64
	8.5.5	Significance of Residual Effects.....	8-65
8.6		Potential Cumulative Effects Assessment	8-65
	8.6.1	Methodology Overview of Cumulative Effects.....	8-65
	8.6.1.1	Spatial Boundaries for the Cumulative Effects Assessment	8-67
	8.6.1.2	Temporal Boundaries for Cumulative Effects Assessment	8-68
	8.6.2	Potential Interactions of Residual Effects with Other Projects	8-68
	8.6.2.1	Habitat Loss	8-68
	8.6.2.2	Disturbance due to Noise	8-75
	8.6.2.3	Attraction	8-83
	8.6.2.4	Reduction in Reproductive Productivity	8-83
	8.6.3	Identification of Mitigation and Management Measures	8-83
	8.6.4	Characterization of Cumulative Residual Effects.....	8-83
	8.6.4.1	Habitat Loss	8-83
	8.6.4.2	Disturbance due to Noise	8-84
	8.6.4.3	Attractants	8-85
	8.6.4.4	Reduction in Reproductive Productivity	8-86
	8.6.5	Significance of Cumulative Residual Effects.....	8-86
8.7		Transboundary Effects.....	8-88
8.8		Mitigation and Adaptive Management	8-88
	8.8.1	Mitigation by Project Design	8-89
	8.8.2	Best Management Practices	8-89
	8.8.3	Adaptive Management	8-89
	8.8.4	Monitoring	8-90
	8.8.5	Summary Table of Mitigation and Adaptive Management Measures	8-90
8.9		Proposed Monitoring Programs	8-92
	8.9.1	Facility-specific Monitoring.....	8-93
	8.9.2	Focal-species Monitoring	8-93
8.10		Impact Statement	8-94
9.		Migratory Birds (Upland Birds and Waterbirds)	9-1
	9.1	Existing Environment and Baseline Information	9-1
	9.1.1	Introduction	9-1
	9.1.2	Population Trends and Conservation.....	9-1

9.1.2.1	Waterbirds	9-2
9.1.2.2	Upland Birds	9-2
9.1.3	Distribution and Migration Patterns	9-3
9.1.3.1	Waterbirds	9-3
9.1.3.2	Upland Birds	9-3
9.1.4	Habitat Use and Diet.....	9-4
9.1.4.1	Waterbirds	9-4
9.1.4.2	Upland Birds	9-4
9.1.5	Baseline Data for Migratory Birds.....	9-5
9.1.5.1	Waterbirds	9-6
9.1.5.2	Upland Birds	9-18
9.2	Incorporation of Traditional Knowledge (TK).....	9-25
9.2.1	Incorporation of TK for Existing Environment and Baseline Information	9-26
9.2.2	Incorporation of TK for VEC and VSEC Selection.....	9-26
9.2.3	Incorporation of TK for Spatial and Temporal Boundaries	9-27
9.2.4	Incorporation of TK for Effects Assessment.....	9-27
9.2.5	Incorporation of TK for Mitigation and Adaptive Management	9-27
9.3	Valued Components	9-28
9.3.1	Potential Valued Components and Scoping	9-28
9.3.2	Valued Components included in Assessment	9-28
9.4	Spatial and Temporal Boundaries.....	9-29
9.4.1	Spatial Boundaries.....	9-29
9.4.1.1	Local Study Area	9-29
9.4.1.2	Regional Study Area	9-29
9.4.2	Temporal Boundaries	9-29
9.5	Potential Project-related Effects Assessment.....	9-30
9.5.1	Methodology Overview	9-30
9.5.1.1	Indicators used to Characterize Potential Residual Effects	9-33
9.5.1.2	Magnitude Ratings for Residual Effects	9-33
9.5.1.3	Overall Significance Ratings for Residual Effects	9-34
9.5.2	Potential Interactions with Project and Characterization	9-35
9.5.2.1	Habitat Loss.....	9-35
9.5.2.2	Disturbance due to Noise	9-40
9.5.2.3	Disruption of Movement	9-46
9.5.2.4	Direct Mortality and Injury	9-47
9.5.2.5	Indirect Mortality	9-47
9.5.2.6	Attraction	9-48
9.5.2.7	Exposure to Contaminants.....	9-49
9.5.2.8	Reduction in Reproductive Productivity	9-49
9.5.3	Identification of Mitigation and Management Measures	9-50
9.5.3.1	Mitigation for Habitat Loss	9-50

	9.5.3.2	Mitigation for Disturbance.....	9-50
	9.5.3.3	Mitigation for Mortality and Injury.....	9-50
	9.5.3.4	Mitigation for Indirect Mortality.....	9-51
	9.5.3.5	Mitigation for Attraction.....	9-51
	9.5.3.6	Mitigation for Exposure to Contaminants	9-52
	9.5.4	Characterization of Residual Effects.....	9-52
	9.5.4.1	Habitat Loss.....	9-52
	9.5.4.2	Disturbance	9-53
	9.5.5	Significance of Residual Effects.....	9-54
9.6		Potential Cumulative Effects Assessment.....	9-54
	9.6.1	Methodology Overview of Cumulative Effects.....	9-54
	9.6.1.1	Spatial Boundary	9-56
	9.6.1.2	Temporal Boundary.....	9-56
	9.6.2	Potential Interactions of Residual Effects with Other Projects	9-56
9.7		Transboundary Effects.....	9-56
9.8		Mitigation And Adaptive Management	9-56
	9.8.1	Mitigation by Project Design	9-57
	9.8.2	Best Management Practices	9-57
	9.8.3	Adaptive Management	9-58
	9.8.4	Monitoring	9-58
	9.8.5	Summary Table of General Wildlife Mitigation and Adaptive Management Measures	9-58
9.9		Proposed Monitoring Programs.....	9-60
	9.9.1	Wildlife Mitigation and Monitoring Plan	9-61
	9.9.1.1	Facility-specific Monitoring	9-61
	9.9.1.2	Focal-species Monitoring of the WEMP.....	9-62
9.10		Impact Statement	9-62
10.		Raptors	10-1
	10.1	Existing Environment and Baseline Information	10-1
	10.1.1	Introduction	10-1
	10.1.2	Population Trends and Conservation.....	10-1
	10.1.3	Distribution and Migration Patterns.....	10-2
	10.1.4	Habitat Use and Diet.....	10-3
	10.1.5	Baseline Data for Raptors.....	10-4
	10.1.5.1	Methods for Baseline Data.....	10-5
	10.1.5.2	Results of Baseline Data Collection.....	10-6
	10.2	Incorporation of Traditional Knowledge (TK).....	10-15
	10.2.1	Incorporation of TK for Existing Environment and Baseline Information	10-15
	10.2.2	Incorporation of TK for VEC and VSEC Selection.....	10-16
	10.2.3	Incorporation of TK for Spatial and Temporal Boundaries	10-16
	10.2.4	Incorporation of TK for Effects Assessment.....	10-16

	10.2.5	Incorporation of TK for Mitigation and Adaptive Management	10-16
10.3		Valued Components	10-17
	10.3.1	Potential Valued Components and Scoping	10-17
	10.3.2	Valued Components included in Assessment	10-18
10.4		Spatial and Temporal Boundaries.....	10-18
	10.4.1	Spatial Boundaries.....	10-18
	10.4.1.1	Local Study Area	10-18
	10.4.1.2	Regional Study Area	10-21
	10.4.2	Temporal Boundaries	10-21
10.5		Potential Project-related Effects Assessment.....	10-21
	10.5.1	Methodology Overview	10-21
	10.5.1.1	Indicators Used to Characterize Potential Residual Effects	10-22
	10.5.1.2	Magnitude Ratings for Residual Effects	10-22
	10.5.1.3	Overall Significance Ratings for Residual Effects	10-23
	10.5.2	Potential Interactions with Project and Characterization	10-24
	10.5.2.1	Habitat Loss.....	10-26
	10.5.2.2	Disturbance due to Noise	10-28
	10.5.2.3	Disruption to Movement	10-39
	10.5.2.4	Direct Mortality and Injury	10-39
	10.5.2.5	Indirect Mortality	10-40
	10.5.2.6	Attraction	10-40
	10.5.2.7	Exposure to Contaminants.....	10-41
	10.5.2.8	Reduction in Reproductive Productivity	10-42
	10.5.3	Identification of Mitigation and Management Measures	10-43
	10.5.3.1	Mitigation for Habitat Loss	10-43
	10.5.3.2	Mitigation for Disturbance.....	10-43
	10.5.3.3	Mitigation for Mortality and Injury.....	10-44
	10.5.3.4	Mitigation for Indirect Mortality.....	10-44
	10.5.3.5	Mitigation for Attraction.....	10-44
	10.5.3.6	Mitigation for Exposure to Contaminants	10-44
	10.5.4	Characterization of Residual Effects.....	10-45
	10.5.4.1	Direct Habitat Loss	10-45
	10.5.4.2	Disturbance	10-46
	10.5.4.3	Direct Mortality and Injury	10-47
	10.5.4.4	Attraction	10-47
	10.5.4.5	Reduction in Reproductive Productivity	10-47
	10.5.5	Significance of Residual Effects.....	10-48
10.6		Potential Cumulative Effects Assessment.....	10-48
	10.6.1	Methodology Overview of Cumulative Effects.....	10-48
	10.6.1.1	Spatial Boundary	10-50
	10.6.1.2	Temporal Boundary.....	10-50

10.6.2	Potential Interactions of Residual Effects with Other Projects	10-50
10.7	Transboundary Effects.....	10-50
10.8	Mitigation and Adaptive Management	10-50
10.8.1	Mitigation by Project Design	10-51
10.8.2	Best Management Practices	10-52
10.8.3	Adaptive Management	10-52
10.8.4	Monitoring	10-52
10.8.5	Summary Table of General Wildlife Mitigation and Adaptive Management Measures.....	10-52
10.9	Proposed Monitoring Programs	10-54
10.9.1	Wildlife Mitigation and Monitoring Plan	10-54
10.9.1.1	Facility-specific Monitoring	10-54
10.9.1.2	Focal-species Monitoring of the WEMP	10-55
10.10	Impact Statement	10-55
	References.....	R-1

List of Figures

FIGURE	PAGE
Figure 1.1-1. Regional Geology Bedrock Map.....	1-2
Figure 1.1-2. Back River Property Geology	1-3
Figure 1.1-3. Airborne Magnetic Survey Results for the Goose Property	1-8
Figure 1.1-4. Goose Property Stylized Geologic Cross-section	1-9
Figure 1.1-5. George Property Stylized Geologic Cross-section	1-11
Figure 2.1-1. Regional Permafrost Context	2-3
Figure 2.1-2. Installed Instruments Used for Characterization of the Existing Permafrost Environment at the Goose Property Area	2-7
Figure 2.1-3. Installed Instruments Used for Characterization of the Existing Permafrost Environment at the George Property Area.....	2-9
Figure 2.1-4. Basal Cryopeg Depth Interpretation.....	2-17
Figure 2.1-5a. Sub-lake Temperature Profiles Derived from Steady-state One-dimensional Analytical Geothermal Models for the Goose Property Area	2-18
Figure 2.1-5b. Sub-lake Temperature Profiles Derived from Steady-state One-dimensional Analytical Geothermal Models for the Goose Property Area	2-19
Figure 2.1-6. Talik Extents at the Goose Property Area	2-21

Figure 2.1-7. Sub-lake Temperature Profiles Derived from Steady-state One-dimensional Analytical Geothermal Models for the George Property Area	2-24
Figure 2.1-8. Talik Extents at the George Property Area	2-25
Figure 3.1-1. Back River Project: Landforms and Soils Local Study Area.....	3-3
Figure 3.1-2. Soil Baseline Inspection Points and Sampling Locations	3-7
Figure 3.1-3. Back River Project: Goose Property Local Study Area	3-11
Figure 3.1-4. Back River Project: George Property Local Study Area	3-13
Figure 3.1-5. Back River Project: Marine Laydown Area Local Study Area.....	3-17
Figure 3.1-6. Back River Project: Winter Roads Local Study Area	3-19
Figure 3.1-7. Back River Project: Natural Distribution of Soil Arsenic in the Local Study Area	3-23
Figure 3.1-8. Back River Project: Natural Distribution of Soil Iron in the Local Study Area	3-25
Figure 3.1-9. Back River Project: Natural Distribution of Soil Manganese in the Local Study Area....	3-27
Figure 3.1-10. Back River Project: Natural Distribution of Soil Nickel in the Local Study Area	3-29
Figure 3.1-11. Back River Project: Natural Distribution of Soil Zinc in the Local Study Area.....	3-31
Figure 4.1-1. Sub-areas of the Local Study Area	4-3
Figure 4.1-2a. Terrestrial Ecosystem Mapping – Overview Map A.....	4-7
Figure 4.1-2b. Terrestrial Ecosystem Mapping – Overview Map B.....	4-9
Figure 4.1-2c. Terrestrial Ecosystem Mapping – Overview Map C.....	4-11
Figure 4.1-2d. Terrestrial Ecosystem Mapping – Overview Map D.....	4-13
Figure 4.1-3. Regional Ecological Classification within the Regional Study Area	4-15
Figure 4.5-1. Goose Potential Development Area – Terrestrial Ecosystem Mapping Diversity Class Summary	4-41
Figure 4.5-2. George Potential Development Area – Terrestrial Ecosystem Mapping Diversity Class Summary	4-43
Figure 4.5-3. Marine Laydown Potential Development Area – Terrestrial Ecosystem Mapping Diversity Class Summary	4-45
Figure 4.5-4. Goose Potential Development Area – Terrestrial Ecosystem Mapping Productivity Class Summary	4-49
Figure 4.5-5. George Potential Development Area – Terrestrial Ecosystem Mapping Productivity Class Summary	4-51
Figure 4.5-6. Marine Laydown Potential Development Area – Terrestrial Ecosystem Mapping Productivity Class Summary	4-53

Figure 4.5-7. Goose Potential Development Area – Terrestrial Ecosystem Mapping Resiliency Class Summary	4-55
Figure 4.5-8. George Potential Development Area – Terrestrial Ecosystem Mapping Resiliency Class Summary	4-57
Figure 4.5-9. Marine Laydown Potential Development Area – Terrestrial Ecosystem Mapping Resiliency Class Summary	4-59
Figure 4.6-1. Spatial Boundary for Vegetation and Special Landscape Feature Potential Cumulative Effects Assessment	4-64
Figure 5.1-1. Annual Ranges of the Bathurst, Beverly, and Dolphin and Union Caribou Herds	5-2
Figure 5.1-2. Locations of Satellite-collared Bathurst Caribou during Winter (1 November to 14 April) and Spring Migration (15 April to 4 June), 1996 to 2012	5-5
Figure 5.1-3. Locations of Satellite-collared Bathurst Caribou during Calving (5 June to 15 June) and Post-calving (16 June to 20 July), 1996 to 2012	5-7
Figure 5.1-4. Traditional Calving Grounds of Bathurst Caribou (1966 to 2012)	5-11
Figure 5.1-5. Locations of Satellite-collared Bathurst Caribou during Summer (21 July to 31 August) and Fall (1 September to 31 October), 1996 to 2012	5-13
Figure 5.1-6. Designated Caribou Crossings.....	5-15
Figure 5.1-7. Caribou Observations during Aerial Surveys, 2001 to 2010.....	5-25
Figure 5.1-8. Caribou Recorded by Remote Camera and Collar Distribution Data, June to August, 2012.....	5-29
Figure 5.1-9. Caribou: Calving Habitat in the Local Study Area and Regional Study Area.....	5-33
Figure 5.1-10. Caribou: Post-calving and Summer Habitat in the Local Study Area and Regional Study Area	5-35
Figure 5.1-11. Caribou: Fall Habitat in the Local Study Area and Regional Study Area	5-37
Figure 5.1-12a. Caribou Habitat Values in the Post-calving Range Based on Resource Selection Modelling, 95% Kernel	5-41
Figure 5.1-12b. Caribou Habitat Values in the Post-calving Core Use Area Based on Resource Selection Modelling, 50% Kernel	5-43
Figure 5.1-12c. Caribou Habitat Values in the Summer Range Based on Resource Selection Modelling, 95% Kernel	5-45
Figure 5.1-12d. Caribou Habitat Values in the Summer Core Use Area Based on Resource Selection Modelling, 50% Kernel	5-47
Figure 5.1-13. Locations of Satellite-collared Beverly Caribou during Winter (1 November to 14 April) and Spring Migration (15 April to 4 June), 2001 to 2012	5-53
Figure 5.1-14. Locations of Satellite-collared Beverly Caribou during Calving (5 June to 20 June) and Post-calving (21 June to 25 July), 2001 to 2012	5-55

Figure 5.1-15. Locations of Satellite-collared Beverly Caribou during Summer (26 July to 31 August) and Fall (1 September to 31 October), 2001 to 2012	5-57
Figure 5.1-16. Locations of Satellite-collared Dolphin and Union Caribou during the Northward Spring Migration (17 April to 29 June), 1999 to 2004	5-63
Figure 5.1-17. Locations of Satellite-collared Dolphin and Union Caribou during Calving and Summer (30 June to 19 October), 1999 to 2004	5-67
Figure 5.1-18. Locations of Satellite-collared Dolphin and Union Caribou during the Southward Fall Migration (20 October to 8 December), 1999 to 2004	5-69
Figure 5.1-19. Locations of Satellite-collared Dolphin and Union Caribou during Winter (9 December to 16 April), 1999 to 2004	5-71
Figure 5.4-1. Local Study Area and Regional Study Area for Caribou	5-81
Figure 5.5-1. Caribou High-quality Habitat Lost, Altered or Disturbed due to the Project	5-97
Figure 5.6-1. Spatial Boundary for Bathurst Caribou Cumulative Effects Assessment	5-117
Figure 5.6-2. Spatial Boundary for Beverly Caribou Cumulative Effects Assessment	5-121
Figure 5.6-3. Habitat Lost or Altered due to All Project Footprints and Noise in the Bathurst Caribou Cumulative Effects Assessment Boundary during Post-calving	5-133
Figure 5.6-4. Habitat Lost or Altered due to All Project Footprints and Noise in the Bathurst Caribou Cumulative Effects Assessment Boundary during Summer	5-137
Figure 5.6-5. Habitat Lost or Altered due to All Project Footprints and Noise in the Beverly Caribou Cumulative Effects Assessment Boundaries	5-141
Figure 6.1-1. Grizzly Bear Satellite Collar Locations, 1995 to 1999	6-5
Figure 6.1-2. Grizzly Bear DNA Grid, Post Locations, and Capture Frequency, 2012	6-11
Figure 6.1-3. Temporal Distribution of Grizzly Bears in the DNA Study Area, 2012	6-15
Figure 6.1-4. Incidental Observations of Grizzly Bears in the Regional Study Area, 2001 to 2012	6-17
Figure 6.1-5. Grizzly Bear: Spring Habitat in the Local Study Area and the Regional Study Area	6-21
Figure 6.1-6. Grizzly Bear: Summer Habitat in the Local Study Area and the Regional Study Area ...	6-23
Figure 6.1-7. Grizzly Bear: Fall Habitat in the Local Study Area and the Regional Study Area	6-25
Figure 6.1-8. Grizzly Bear: Denning Habitat in the Local Study Area and the Regional Study Area ...	6-27
Figure 6.4-1. Local Study Area and Regional Study Area for Grizzly Bear	6-33
Figure 6.5-1. Grizzly Bear High-quality Habitat Lost, Altered or Disturbed due to the Project	6-49
Figure 6.6-1. Spatial Boundary for Grizzly Bear Cumulative Effects Assessment	6-65
Figure 6.6-2. Habitat Lost or Altered due to All Project Footprints and Noise in the Grizzly Bear Cumulative Effects Assessment Boundary	6-71
Figure 7.1-1. Muskox Observations in the Regional Study Area (2001 to 2012)	7-5

Figure 7.1-2. Muskox: Summer and Fall Habitat in the Local Study Area and Regional Study Area	7-9
Figure 7.1-3. Muskox: Winter and Early Spring Habitat in the Local Study Area and Regional Study Area	7-11
Figure 7.4-1. Local Study Area and Regional Study Area for Muskox	7-17
Figure 7.5-1. Muskox High-quality Habitat Lost, Altered or Disturbed due to the Project	7-33
Figure 7.6-1. Spatial Boundary for Muskox Cumulative Effects Assessment	7-49
Figure 7.6-2. Habitat Lost or Altered due to All Project Footprints and Noise in the Muskox Cumulative Effects Assessment Boundary	7-55
Figure 8.1-1. Wolverine Harvest Data (1986 to 2005)	8-3
Figure 8.1-2. Wolverine DNA North Study Grid, 2013	8-10
Figure 8.1-3. Wolverine DNA Grid, Post Locations, and Capture Frequency, 2012	8-12
Figure 8.1-4. Wolverine Distance Movements during DNA Surveys, 2012	8-13
Figure 8.1-5. Den Locations and Incidental Observations of Wolverines, 2001 to 2012	8-17
Figure 8.1-6. Wolverine: Denning Habitat in the Local Study Area and Regional Study Area	8-19
Figure 8.1-7. Wolf Sightings and Locations of Dens (2001 to 2012)	8-21
Figure 8.1-8. Grey Wolf: Denning Habitat in the Local Study Area and Regional Study Area	8-25
Figure 8.4-1. Local Study Area and Regional Study Area for Wolverine and Grey Wolf	8-31
Figure 8.5-1. Wolverine High-quality Habitat Lost, Altered or Disturbed due to the Project	8-47
Figure 8.5-2. Grey Wolf High-quality Habitat Lost, Altered or Disturbed due to the Project	8-49
Figure 8.6-1. Spatial Boundary for Wolverine Cumulative Effects Assessment	8-69
Figure 8.6-2. Spatial Boundary for Grey Wolf Cumulative Effects Assessment	8-71
Figure 8.6-3. Habitat Lost or Altered due to All Project Footprints and Noise in the Wolverine Cumulative Effects Assessment Boundary	8-79
Figure 8.6-4. Habitat Lost or Altered due to All Project Footprints and Noise in the Grey Wolf Cumulative Effects Assessment Boundary	8-81
Figure 9.1-1a. Geese, Cranes, and Swans Observed Near the George and Goose Property Areas during Aerial Surveys in 2011 and 2012	9-7
Figure 9.1-1b. Ducks, Gulls, and Terns Observed Near the George and Goose Property Areas during Aerial Surveys in 2011 and 2012	9-9
Figure 9.1-2. Waterbirds Observed near the Marine Laydown Area during Aerial Surveys in 2013	9-11
Figure 9.1-3. Location of PRISM Plots to Survey Uplands Birds within the Regional Study Area	9-19
Figure 9.1-4. Species Richness of Upland Birds in PRISM Plots, 2011 and 2012	9-23

Figure 9.4-1. Local Study Area and Regional Study Area for Migratory Birds	9-31
Figure 10.1-1. Nest Site Locations of Raptors and Incidental Observation of Ground-nesting Raptors in the Regional Study Area, 2002 to 2013.....	10-7
Figure 10.1-2. Cliff-nesting Raptors: Nesting Habitat in the Local Study Area and Regional Study Area.....	10-11
Figure 10.1-3. Short-eared Owl: Nesting Habitat in the Local Study Area and Regional Study Area .	10-13
Figure 10.4-1. Local Study Area and Regional Study Area for Raptors.....	10-19
Figure 10.5-1. Suitable Nesting Habitat Lost, Altered or Disturbed due to the Project for Cliff-nesting Raptors	10-35
Figure 10.5-2. Short-eared Owl Suitable Nesting Habitat Lost, Altered or Disturbed due to the Project	10-37

List of Tables

TABLE	PAGE
Table 1.1-1. Geological Units and Lithocodes for the Back River Project.....	1-4
Table 2.1-1. Permafrost Characteristics Identified for Mining Projects within Mainland Nunavut.....	2-2
Table 2.1-2. Input Parameters for Sub-lake One-dimensional Analytical Geothermal Models.....	2-14
Table 2.1-3. Permafrost Properties Interpreted from Subsurface Temperature Data Acquired at the Goose Property Area	2-16
Table 2.1-4. Permafrost Properties Interpreted from Subsurface Temperature Data Acquired near the George Property Area.....	2-23
Table 3.1-1. Proportion of the Potential Development Areas Dominated by Different Surficial Materials	3-9
Table 3.1-2. Thickness of Overburden under Various Surficial Deposit Types.....	3-10
Table 3.4-1. Summary of the Residual Effects of the Project Development on Soil Quantity	3-35
Table 4.1-1. Summary of Mapped Ecosystems in the Local Study Area	4-5
Table 4.1-2. Ecological Land Classification Summary within the RSA.....	4-17
Table 4.3-1. Terrestrial Vegetation Identified through Traditional Knowledge	4-20
Table 4.3-2. Summary of Special Landscape Features.....	4-22
Table 4.5-1. Definitions of Magnitude Criteria for Vegetation and Special Landscape Features Residual Effects.....	4-27
Table 4.5-2. Potential Effects on Vegetation and Special Landscape Features	4-28
Table 4.5-3. Summary of Project Footprints within the Potential Development Areas.....	4-29

Table 4.5-4. Summary of Loss within Potential Development Areas	4-34
Table 4.5-5. Summary of Loss, by Ecosystem Class, within Potential Development Areas.....	4-36
Table 4.5-6. Summary of Loss from Special Landscape Features within the Potential Development Areas	4-38
Table 4.5-7. Diversity Class and Estimated Species Richness.....	4-39
Table 4.5-8. Ecosystem Diversity Estimates within the LSA	4-39
Table 4.5-9. Summary of Loss by Diversity Class within the Potential Development Areas.....	4-40
Table 4.5-10. Productivity Classes	4-46
Table 4.5-11. Ecosystem Productivity Estimates.....	4-46
Table 4.5-12. Summary of Loss by Productivity Class.....	4-47
Table 4.5-13. Ecosystem Resiliency Estimates	4-54
Table 4.5-14. Summary of Loss by Resiliency Class within the Potential Development Areas.....	4-60
Table 4.5-15. Summary of Residual Effects Significance Determination	4-61
Table 4.6-1. Interactions of Residual Effects from Back River Project with Other Projects.....	4-65
Table 4.6-2. Summary of Potential Cumulative Interaction with the Back River Project	4-66
Table 4.6-3. Summary of Cumulative Residual Effects Significance Determination.....	4-67
Table 4.8-1. Summary of Mitigation and Adaptive Management Measures for Vegetation and Special Landscape Features	4-69
Table 5.1-1. Timing of Life History Stages of Bathurst Caribou	5-4
Table 5.1-2. Bathurst Caribou Herd Population Numbers and Breeding Females from 1986 to 2009 .	5-17
Table 5.1-3. Aerial Survey Flights in the Regional Study Area	5-24
Table 5.1-4. Seasonal Life Requisites of Caribou	5-31
Table 5.1-5. Area and Proportion of Habitat within the LSA and RSA for Caribou.....	5-31
Table 5.1-6. Timing of Life History Stages of Beverly Caribou	5-51
Table 5.1-7. Timing of Life History Stages of Dolphin and Union Caribou.....	5-65
Table 5.4-1. Temporal Boundaries - Project Phase Durations.....	5-80
Table 5.5-1. Criteria and Indicators Used to Characterize Potential Effects on Caribou.....	5-83
Table 5.5-2. Definitions of the Magnitude Ratings for Population Health Criterion	5-84
Table 5.5-3. Definitions of Significance Ratings for Residual Effects on Caribou	5-85
Table 5.5-4. Potential Project-related Effects to Caribou in the Goose Property Area, the George Property Area, and the Marine Laydown Area	5-88

Table 5.5-5. Habitat Loss and Degradation within the Project Development Areas (PDAs).....	5-90
Table 5.5-6. High-quality Caribou Habitat Lost (or Degraded) in the LSA and RSA due to Development of the Back River Project	5-92
Table 5.5-7. Total Additional Area Functionally Lost or Disturbed due to Project Noise.....	5-99
Table 5.5-8. Expected Caribou High-quality Habitat Functionally Lost or Disturbed due to Noise outside of the Project Potential Development Areas.....	5-99
Table 5.5-9. Summary of Residual Effects on Caribou and Overall Significance Rating	5-115
Table 5.6-1. Residual Effects from the Back River Project and Other Human Activities with the Potential to Interact with Caribou in the Area.....	5-120
Table 5.6-2. Cumulative Habitat Loss in the Bathurst Caribou CEA Boundary.....	5-125
Table 5.6-3. Cumulative Habitat Loss in the Beverly Caribou CEA Boundary	5-127
Table 5.6-4. Zone of Influence due to Disturbance in the Bathurst Caribou CEA Boundary.....	5-131
Table 5.6-5. Results of the 4 km and 14 km Scenarios for Bathurst Caribou Zone of Influence due to Disturbance	5-135
Table 5.6-6. Zone of Influence due to Disturbance in the Beverly Caribou Summer CEA Boundary ..	5-139
Table 5.6-7. Results of the 4 km and 14 km Scenarios for Beverly Caribou Zone of Influence due to Disturbance	5-140
Table 5.6-8. Summary of Cumulative Residual Effects to Caribou and their Significance.....	5-148
Table 5.8-1. Summary of Mitigation and Management Measures Applicable to Terrestrial Wildlife (Including Caribou)	5-150
Table 6.1-1. Seasonal Periods for Grizzly Bear.....	6-4
Table 6.1-2. Seasonal Life Requisites of Grizzly Bear.....	6-13
Table 6.1-3. Distance Travelled and Area Used by Grizzly Bears, 2012	6-14
Table 6.1-4. Area and Proportion of High, Moderate, Low, and Nil-rated Habitat within the LSA and RSA for Grizzly Bear	6-19
Table 6.4-1. Temporal Boundaries - Project Phase Durations	6-32
Table 6.5-1. Criteria and Indicators Used to Characterize Potential Effects on Grizzly Bears.....	6-35
Table 6.5-2. Definitions of the Magnitude Ratings for Population Health Criterion	6-36
Table 6.5-3. Definitions of Significance Ratings for Residual Effects on Grizzly Bears	6-37
Table 6.5-4. Potential Project-related Effects to Grizzly Bear in the Goose Property Area, the George Property Area, and the Marine Laydown Area.....	6-38
Table 6.5-5. Habitat Loss due to the Potential Development Areas	6-43
Table 6.5-6. High-quality Grizzly Bear Habitat Lost in the Wildlife LSA and RSA due to Development of the Back River Project	6-43

Table 6.5-7. Total Additional Area Functionally Lost or Disturbed due to Project Noise.....	6-51
Table 6.5-8. Expected Grizzly Bear High-quality Habitat Functionally Lost or Disturbed due to Noise Outside of the Project Potential Development Areas	6-51
Table 6.5-9. Summary of Residual Effects on Grizzly Bear and Overall Significance Rating	6-63
Table 6.6-1. Residual Effects from the Back River Project and Other Human Activities with the Potential to Interact with Grizzly Bears in the Area	6-67
Table 6.6-2. Cumulative Habitat Loss in the Grizzly Bear CEA Boundary	6-69
Table 6.6-3. Total Area of Habitat affected due to Disturbance by Noise in the Grizzly Bear CEA Boundary	6-70
Table 6.6-4. Summary of Cumulative Residual Effects to Grizzly Bear and their Significance	6-77
Table 6.8-1. Summary of Mitigation and Management Measures Applicable to Grizzly Bears	6-79
Table 7.1-1. Muskox Seasonal Habitat within the Local Study Area and Regional Study Area	7-8
Table 7.4-1. Temporal Boundaries – Project Phase Durations	7-16
Table 7.5-1. Criteria and Indicators Used to Characterize Potential Effects on Muskox	7-19
Table 7.5-2. Definitions of the Magnitude Ratings for Population Health Criterion	7-20
Table 7.5-3. Definitions of Significance Ratings for Residual Effects on Muskox.....	7-21
Table 7.5-4. Potential Project-related Effects in Muskox in the Goose Property Area, the George Property Area, and the Marine Laydown Area	7-22
Table 7.5-5. Habitat Loss within the Project Potential Development Areas (PDAs).....	7-26
Table 7.5-6. High-quality Muskox Habitat Lost in the Wildlife LSA and RSA due to Development of the Back River Project.....	7-27
Table 7.5-7. Total Additional Area Functionally Lost or Disturbed due to Project Noise.....	7-32
Table 7.5-8. Expected High-Quality Habitat Functionally Lost or Disturbed due to Noise outside of the Project Potential Development Areas	7-35
Table 7.5-9. Traffic Volumes along Winter Road Corridors	7-38
Table 7.5-10. Summary of Residual Effects on Muskox and Overall Significance Rating.....	7-46
Table 7.6-1. Residual Effects from the Back River Project and Other Human Activities with the Potential to Interact with Muskox in the Cumulative Effects Assessment Boundary	7-48
Table 7.6-2. Cumulative Habitat Loss in the VEC Muskox CEA Boundary	7-51
Table 7.6-3. Total Area of Habitat Affected due to Disturbance by Noise in the Muskox CEA Boundary..	7-54
Table 7.6-4. Summary of Cumulative Residual Effects to Muskox and their Significance	7-60
Table 7.8-1. Summary of Mitigation and Management Measures Applicable to Muskox	7-63
Table 8.1-1. Seasonal Life Requisites of Wolverine Denning	8-15

Table 8.1-2. Area and Proportion of Suitable and Not Suitable Habitat within the Wildlife LSA for Wolverine Denning	8-16
Table 8.1-3. Seasonal Life Requisites of Grey Wolf	8-23
Table 8.1-4. Area and Proportion of High, Moderate, Low, and Nil-rated Habitat within the Wildlife LSA and RSA for Grey Wolf	8-23
Table 8.4-1. Temporal Boundaries – Project Phase Durations	8-30
Table 8.5-1. Criteria, Indicators and Triggers Used to Characterize Potential Residual Effects on Wolverine and Grey Wolf	8-33
Table 8.5-2. Definitions of the Magnitude Ratings for Residual Effects Based on Population Health Criterion	8-33
Table 8.5-3. Definitions of Significance Ratings for Residual Effects on Wolverine and Grey Wolf ...	8-34
Table 8.5-4. Potential Project-related Effects to Wolverine and Wolves in the Goose Property Area, the George Property Area, and the Marine Laydown Area	8-36
Table 8.5-5. Habitat Loss due to the Potential Development Areas	8-39
Table 8.5-6. High-quality Wolverine and Grey Wolf Habitat Lost in the Wildlife LSA and RSA due to Development of the Back River Project.....	8-40
Table 8.5-7. Total Additional Area Functionally Lost or Disturbed due to Project Noise.....	8-46
Table 8.5-8. Expected Wolverine High-quality Habitat Functionally Lost or Disturbed due to Noise Outside of the Project Potential Development Areas	8-46
Table 8.5-9. Expected Grey Wolf High-quality Habitat Functionally Lost or Disturbed due to Noise Outside of the Project Potential Development Areas	8-52
Table 8.5-10. Traffic Volumes along Winter Road Corridors.....	8-54
Table 8.5-11. Summary of Residual Effects on Wolverine and Overall Significance Rating	8-66
Table 8.5-12. Summary of Residual Effects on Grey Wolf and Overall Significance Rating	8-66
Table 8.6-1. Residual Effects from the Back River Project and Other Human Activities with the Potential to Interact with Wolverines in the Cumulative Effects Assessment Boundary	8-73
Table 8.6-2. Residual Effects from the Back River Project and Other Human Activities with the Potential to Interact with Grey Wolves in the Cumulative Effects Assessment Boundary.....	8-73
Table 8.6-3. Cumulative Habitat Loss in the Wolverine CEA Area	8-75
Table 8.6-4. Cumulative Habitat Loss in the Grey Wolf CEA Boundary	8-76
Table 8.6-5. Area of Habitat Disturbance by Noise in the Wolverine CEA Boundary	8-77
Table 8.6-6. Area of Habitat Disturbance by Noise in the Grey Wolf CEA Boundary	8-78
Table 8.6-7. Summary of Cumulative Residual Effects to Wolverine and their Significance.....	8-87
Table 8.6-8. Summary of Cumulative Residual Effects to Grey Wolf and their Significance.....	8-87

Table 8.8-1. Summary of Mitigation and Management Measures Applicable to Wolverine and Furbearers (Grey Wolf)	8-90
Table 9.1-1. Regularity and Timing of Occurrence of Migratory Bird Species in the Wildlife RSA	9-13
Table 9.1-2. Total Number of Waterbirds Observed in the Wildlife RSA during Baseline Aerial Surveys (2011-2013).....	9-17
Table 9.1-3. Density Estimates (Uncorrected for Detectability) of Upland Birds in PRISM Plots	9-21
Table 9.1-4. Density Estimates Derived from Counts of Upland Bird Pairs and Nests in Moist to Wet and Dry Habitats	9-25
Table 9.4-1. Temporal Boundaries – Project Phase Durations	9-30
Table 9.5-1. Criteria and Indicators used to Characterize Potential Effects on Migratory Birds	9-33
Table 9.5-2. Definitions of the Magnitude Ratings for Population Health Criterion	9-34
Table 9.5-3. Definitions of Significance Ratings for Residual Effects on Migratory Birds	9-35
Table 9.5-4. Interactions of Migratory Birds with Project Components that May Result in Effects on Migratory Birds	9-36
Table 9.5-5. Area of Habitat Loss within the Project Development Areas	9-38
Table 9.5-6. Surface Area of Waterbodies and Wetlands in the Wildlife LSA.....	9-38
Table 9.5-7. Surface Area of Waterbodies in the Wildlife RSA Based on WKSS Landcover Classification .	9-38
Table 9.5-8. Suitable Habitat Lost for Waterbirds in the Wildlife LSA and RSA due to the Project PDAs..	9-39
Table 9.5-9. Landcover of Dry and Moist to Wet Vegetation Communities in the Wildlife LSA	9-39
Table 9.5-10. Landcover of Dry and Moist to Wet Vegetation Communities in the Wildlife RSA.....	9-39
Table 9.5-11. Suitable Habitat Lost for Upland Birds in the Wildlife LSA and RSA due to the Project PDAs.....	9-40
Table 9.5-12. Total Additional Area Functionally Lost or Disturbed due to Project Noise	9-44
Table 9.5-13. Suitable Habitat for Waterbirds Disturbed and/or Abandoned outside of the Project PDAs due to Noise	9-44
Table 9.5-14. Suitable Habitat for Upland Birds Disturbed and/or Abandoned outside of the Project PDAs due to Noise	9-45
Table 9.5-15. Summary of Residual Effects Assessment for Waterbirds Resulting in Overall Significance Rating	9-55
Table 9.5-16. Summary of Residual Effects Assessment for Upland Birds Resulting in Overall Significance Rating	9-55
Table 9.8-1. Summary of Mitigation and Management Measures Applicable to Terrestrial Wildlife – including Migratory Birds	9-58
Table 10.1-1. Average Home Range Size of Cliff-nesting Raptor Species	10-4

Table 10.1-2. Total Number of Raptors Observed in the Wildlife RSA during 2007, 2011, 2012, and 2013 Surveys	10-9
Table 10.1-3. Total Number of Occupied Nest Sites Detected in the Wildlife RSA during Baseline Surveys 2002 to 2013	10-9
Table 10.1-4. Area and Proportion of Suitable and Not Suitable Habitat within the LSA and RSA for Cliff-nesting Raptors.....	10-10
Table 10.1-5. Area and Proportion of Suitable and Not Suitable Habitat within the LSA and RSA or Short-eared Owl	10-15
Table 10.4-1. Temporal Boundaries - Project Phase Durations	10-21
Table 10.5-1. Criteria and Indicators Used to Characterize Potential Effects on Raptors	10-22
Table 10.5-2. Definitions of the Magnitude Ratings for Population Health Criterion	10-23
Table 10.5-3. Definitions of Significance Ratings for Residual Effects on Raptors.....	10-24
Table 10.5-4. Interaction of Raptors with Project Components that May Result in Effects on Raptors .	10-25
Table 10.5-5. Area of Habitat Loss within the Project Development Areas.....	10-27
Table 10.5-6. Suitable Habitat Lost for Cliff-nesting Raptors in the LSA and RSA due to the Project PDAs.....	10-27
Table 10.5-7. Short-eared Owl Suitable Habitat Lost in the Wildlife LSA and RSA due to the Project PDAs.....	10-27
Table 10.5-8. Raptor Nests within 1.5 km and 12 km of Proposed Infrastructure	10-32
Table 10.5-9. Total Additional Area Functionally Lost or Disturbed due to Project Noise	10-34
Table 10.5-10. Suitable Habitat for Cliff-nesting Raptors Disturbed and/or Abandoned outside of the Project PDAs due to Noise	10-34
Table 10.5-11. Suitable Habitat for Short-eared Owls Disturbed and/or Abandoned outside of the Project PDAs due to Noise	10-34
Table 10.5-12. Summary of Residual Effects Assessment for Raptors Resulting in Overall Significance Rating	10-49
Table 10.8-1. Summary of Mitigation and Management Measures Applicable to Raptors	10-52

List of Appendices

- Appendix V5-2A. 2010 Thermistor Data Summary (Goose Property) Memorandum Report
- Appendix V5-2B. 2012 Thermistor Data Summary (Goose Property) Memorandum Report
- Appendix V5-2C. 2012 to 2013 Thermistor String Records Obtained at the Hackett River Project
- Appendix V5-3A. Back River Project: 2012 Terrain and Soils Baseline Report
- Appendix V5-3B. Back River Project: 2013 Terrain Maps
- Appendix V5-4A. Back River Project: 2012 Ecosystems and Vegetation Baseline Report
- Appendix V5-5A. Back River Project: 2013 Habitat Suitability Baseline
- Appendix V5-5B. Back River Project: 2013 Habitat Selection by Bathurst Caribou during the
Post-calving and Summer Periods
- Appendix V5-5C. Back River Project: Wildlife Baseline Report 2012
- Appendix V5-5D. Back River Project: Wildlife Baseline Report 2011
- Appendix V5-5E. Back River and Hackett River Projects: 2010 Caribou and Muskox Baseline Report

Volume 6. Freshwater Environment

Executive Summary	i
Table of Contents	xxv
List of Figures	xxxiii
List of Tables	xxxvi
List of Appendices	xli
Acronyms and Abbreviations	xlili
1. Surface Water Hydrology.....	1-1
1.1 Existing Environment and Baseline Information	1-1
1.1.1 Regional Setting	1-1
1.1.1.1 Regional Watersheds	1-1
1.1.1.2 Available Regional Hydrologic Data.....	1-1
1.1.1.3 Hydrological Processes.....	1-2
1.1.1.4 Annual Runoff and Seasonal Distribution	1-10
1.1.1.5 Peak Flows	1-14
1.1.1.6 Low Flows	1-14
1.1.2 Local Setting	1-14
1.1.2.1 Goose Property Area	1-19
1.1.2.2 George Property Area	1-24
1.1.2.3 Marine Laydown Area	1-26
1.1.3 Anticipated Global Climate Change and its Hydrologic Impacts	1-26
1.1.3.1 Changes to the Active Layer and its Hydrologic Impacts	1-30
1.1.3.2 Changes to Runoff	1-30
1.1.3.3 Changes to Winter Flow.....	1-31
1.1.3.4 Hydrologic Impacts of Extreme Weather Events	1-31
1.1.3.5 Changes to Other Hydrologic Variables	1-31
1.2 Incorporation of Traditional Knowledge (TK).....	1-32
1.2.1 Incorporation of TK for Existing Environment and Baseline Information	1-32
1.2.2 Incorporation of TK for VEC and VSEC Selection.....	1-33
1.2.3 Incorporation of TK for Spatial and Temporal Boundaries	1-33
1.3 Valued Components	1-33
1.3.1 Potential Valued Components and Scoping	1-33
1.3.2 Valued Components Included in Assessment	1-33
1.4 Spatial and Temporal Boundaries.....	1-34
1.4.1 Spatial Boundaries.....	1-34
1.4.1.1 Local Study Area	1-39
1.4.1.2 Regional Study Area	1-39
1.4.2 Temporal Boundaries	1-40

1.4.2.1	Site Preparation and Construction	1-40
1.4.2.2	Operations.....	1-41
1.4.2.3	Reclamation and Closure, and Post-closure.....	1-41
1.4.2.4	Maximum Footprint Conditions	1-41
1.5	Potential Project-related Effects Assessment.....	1-41
1.5.1	Methodology Overview	1-41
1.5.2	Potential Interactions with Project and Characterization	1-44
1.5.3	Identification of Mitigation and Management Measures	1-44
1.5.4	Characterization of Residual Effects.....	1-45
1.5.4.1	Goose Property	1-46
1.5.4.2	George Property.....	1-48
1.5.5	Significance of Residual Effects.....	1-49
1.6	Potential Cumulative Effects Assessment	1-51
1.6.1	Methodology Overview	1-51
1.7	Transboundary Effects.....	1-52
1.8	Mitigation and Adaptive Management	1-52
1.9	Impact Statement	1-53
2.	Groundwater	2-1
2.1	Existing Environment and Baseline Information	2-1
2.1.1	Regional Setting	2-1
2.1.1.1	Geologic Context.....	2-1
2.1.1.2	Groundwater Flow	2-1
2.1.1.3	Groundwater Quality	2-2
2.1.2	Local Setting	2-4
2.1.2.1	Data Collection and Analytical Methods	2-4
2.1.2.2	Goose Property Area	2-10
2.1.2.3	George Property Area	2-19
2.1.2.4	Marine Laydown Area and Winter Road Corridors.....	2-28
2.2	Incorporation of Traditional Knowledge (TK).....	2-28
2.2.1	Incorporation of TK for Existing Environment and Baseline Information	2-28
2.2.2	Incorporation of TK for Spatial and Temporal Boundaries	2-30
2.2.3	Incorporation of TK for Mitigation and Adaptive Management	2-30
2.3	Valued Components	2-30
2.3.1	Potential Valued Components and Scoping	2-30
2.3.2	Valued Components Included in Assessment	2-30
2.4	Supporting and Supplemental Information.....	2-30
2.4.1	Interaction of Groundwater with the Project	2-30
2.4.2	Numerical Groundwater Models and Groundwater Budget.....	2-31
2.4.3	Supporting Documents.....	2-31
3.	Limnology and Bathymetry	3-1

3.1	Existing Environment and Baseline Information	3-1
3.1.1	Overview and Regional Setting.....	3-1
3.1.2	Baseline Study Area	3-1
3.1.3	Proximity to Designated Environmental Areas	3-1
3.1.4	Baseline Studies	3-7
3.1.4.1	Information Sources	3-7
3.1.4.2	Baseline Study Methods	3-7
3.1.5	Lake Limnology and Bathymetry.....	3-8
3.1.5.1	Lake Limnology.....	3-8
3.1.5.2	Lake Bathymetry	3-13
3.1.6	Stream Temperatures.....	3-14
3.2	Incorporation of Traditional Knowledge (TK).....	3-17
3.2.1	Incorporation of TK for Existing Environment and Baseline Information	3-17
3.2.2	Incorporation of TK for Valued Ecosystem Component (VEC) Selection	3-18
3.3	Valued Components	3-18
3.3.1	Potential Valued Components and Scoping	3-18
3.3.2	Valued Components Included in Assessment	3-18
4.	Freshwater Water Quality	4-1
4.1	Existing Environment and Baseline Information	4-1
4.1.1	Overview and Regional Setting.....	4-1
4.1.2	Proximity to Designated Environmental Areas	4-3
4.1.3	Baseline Study Area	4-3
4.1.4	Baseline Studies	4-3
4.1.4.1	Information Sources	4-3
4.1.4.2	Baseline Study Methods	4-4
4.1.5	Lake Water Quality.....	4-17
4.1.5.1	General Lake Parameters.....	4-17
4.1.5.2	Lake Total Suspended Solids and Turbidity	4-18
4.1.5.3	Lake Dissolved Oxygen	4-18
4.1.5.4	Lake Nutrients	4-20
4.1.5.5	Lake Metals	4-21
4.1.5.6	Lake Cyanide.....	4-23
4.1.6	Stream Water Quality.....	4-24
4.1.6.1	General Stream Parameters.....	4-24
4.1.6.2	Stream TSS and Turbidity.....	4-25
4.1.6.3	Stream Dissolved Oxygen	4-26
4.1.6.4	Stream Nutrients.....	4-26
4.1.6.5	Stream Metals	4-27
4.1.6.6	Stream Cyanide.....	4-29
4.2	Incorporation of Traditional Knowledge (TK).....	4-30
4.2.1	Incorporation of TK for Existing Environment and Baseline Information	4-30

4.2.2	Incorporation of TK for Valued Ecosystem Component Selection.....	4-31
4.2.3	Incorporation of TK for Spatial and Temporal Boundaries	4-31
4.2.4	Incorporation of TK for Effects Assessment.....	4-31
4.2.5	Incorporation of TK for Mitigation and Adaptive Management	4-31
4.3	Valued Components	4-31
4.3.1	Valued Components Included in Assessment	4-31
4.4	Spatial and Temporal Boundaries.....	4-32
4.4.1	Spatial Boundaries.....	4-32
4.4.1.1	Local Study Area	4-32
4.4.1.2	Regional Study Area	4-32
4.4.2	Temporal Boundaries	4-35
4.5	Potential Project-Related Effects Assessment	4-35
4.5.1	Methodology Overview	4-35
4.5.1.1	Water Quality Indicators.....	4-36
4.5.2	Identification and Characterization of Potential Interactions with Project ..	4-38
4.5.2.1	Site Preparation, Construction, and Decommissioning Activities ..	4-43
4.5.2.2	Winter Roads.....	4-43
4.5.2.3	Site Contact Water	4-44
4.5.2.4	Mine Contact Water	4-44
4.5.2.5	Water Use	4-44
4.5.2.6	Quarries and Borrow Pits	4-44
4.5.2.7	Explosives	4-45
4.5.2.8	Fuels, Oils, and PAH	4-45
4.5.2.9	Treated Sewage Discharge	4-45
4.5.2.10	Dust Deposition.....	4-45
4.5.3	Identification of Mitigation and Management Measures	4-46
4.5.3.1	Site Preparation, Construction, and Decommissioning Activities ..	4-46
4.5.3.2	Winter Roads.....	4-48
4.5.3.3	Site Contact Water	4-49
4.5.3.4	Mine Contact Water	4-49
4.5.3.5	Water Use	4-50
4.5.3.6	Quarries and Borrow Pits	4-50
4.5.3.7	Explosives	4-51
4.5.3.8	Fuels, Oils, and PAH	4-52
4.5.3.9	Treated Sewage Discharge	4-53
4.5.4	Characterization of Residual Effects.....	4-53
4.5.4.1	Site Preparation, Construction, and Decommissioning Activities ..	4-53
4.5.4.2	Site Contact Water	4-54
4.5.4.3	Mine Contact Water	4-55
4.5.5	Significance of Residual Effects.....	4-56
4.6	Potential Cumulative Effects Assessment.....	4-56

4.6.1	Methodology Overview	4-56
4.6.2	Potential Interactions of Residual Effects with Other Projects	4-58
4.7	Transboundary Effects	4-58
4.8	Mitigation and Adaptive Management	4-58
4.9	Proposed Monitoring Programs	4-62
4.9.1	Conceptual Aquatic Effects Management Plan	4-62
4.10	Impact Statement	4-62
4.11	Supporting and Supplemental Information.....	4-63
4.11.1	Drinking Water Baseline	4-63
5.	Freshwater Sediment Quality	5-1
5.1	Existing Environment and Baseline Information	5-1
5.1.1	Overview and Regional Setting.....	5-1
5.1.2	Proximity to Designated Environmental Areas	5-3
5.1.3	Baseline Study Area	5-3
5.1.4	Baseline Studies	5-3
5.1.4.1	Information Sources	5-3
5.1.4.2	Baseline Study Methods	5-3
5.1.5	Lake Physical and Chemical Sediment Quality Parameters	5-9
5.1.5.1	Lake Sediment Particle Size Composition	5-10
5.1.5.2	Lake Sediment Total Organic Carbon.....	5-10
5.1.5.3	Lake Sediment Metals	5-11
5.1.6	Stream Physical and Chemical Sediment Quality Characteristics.....	5-14
5.1.6.1	Stream Sediment Composition.....	5-14
5.1.6.2	Stream Sediment Total Organic Carbon.....	5-15
5.1.6.3	Stream Sediment Metals	5-15
5.2	Incorporation of Traditional Knowledge (TK).....	5-17
5.2.1	Incorporation of TK for Existing Environment and Baseline Information	5-17
5.2.2	Incorporation of TK for VEC Selection	5-17
5.3	Valued Components	5-18
5.3.1	Valued Components and Scoping	5-18
5.4	Spatial and Temporal Boundaries.....	5-18
5.4.1	Spatial Boundaries.....	5-18
5.4.1.1	Local Study Area	5-18
5.4.1.2	Regional Study Area	5-21
5.4.2	Temporal Boundaries	5-21
5.5	Potential Project-related Effects Assessment.....	5-21
5.5.1	Methodology Overview	5-21
5.5.1.1	Sediment Quality Indicators.....	5-23
5.5.2	Identification and Characterization of Potential Interactions with Project ..	5-24
5.5.2.1	Site Preparation, Construction, and Decommissioning Activities ..	5-28
5.5.2.2	Site Contact Water	5-28

5.5.2.3	Mine Contact Water	5-28
5.5.2.4	Quarries and Borrow Pits	5-29
5.5.2.5	Explosives	5-29
5.5.2.6	Fuels, Oils, and PAH	5-29
5.5.2.7	Treated Sewage Discharge	5-30
5.5.2.8	Dust Deposition.....	5-30
5.5.3	Identification of Mitigation and Management Measures	5-30
5.5.3.1	Site Preparation, Construction, and Decommissioning Activities ..	5-31
5.5.3.2	Site Contact Water	5-33
5.5.3.3	Mine Contact Water	5-33
5.5.3.4	Quarries and Borrow Pits	5-33
5.5.3.5	Explosives	5-34
5.5.3.6	Fuels, Oils, and PAH	5-35
5.5.3.7	Treated Sewage Discharge	5-36
5.5.4	Characterization of Residual Effects.....	5-36
5.5.4.1	Site Preparation, Construction, and Decommissioning Activities ..	5-36
5.5.4.2	Site Contact Water	5-37
5.5.4.3	Mine Contact Water	5-38
5.5.5	Significance of Residual Effects.....	5-39
5.6	Potential Cumulative Effects Assessment	5-39
5.6.1	Methodology Overview	5-39
5.6.2	Potential Interactions of Residual Effects with Other Projects	5-41
5.7	Transboundary Effects.....	5-41
5.8	Mitigation and Adaptive Management	5-41
5.9	Proposed Monitoring Programs	5-45
5.9.1	Conceptual Aquatic Effects Management Plan	5-45
5.10	Impact Statement	5-45
6.	Freshwater Fish/Aquatic Habitat.....	6-1
6.1	Existing Environment and Baseline Information	6-1
6.1.1	Overview and Regional Setting.....	6-1
6.1.2	Regulatory Framework	6-1
6.1.2.1	Fisheries Act	6-1
6.1.2.2	Metal Mining Effluent Regulations	6-3
6.1.3	Proximity to Designated Environmental Areas	6-4
6.1.4	Baseline Study Area	6-4
6.1.5	Baseline Studies	6-9
6.1.5.1	Information Sources	6-9
6.1.5.2	Baseline Study Methods – Lakes and Ponds.....	6-10
6.1.5.3	Baseline Study Methods – Streams	6-18
6.1.5.4	Fish/Aquatic Habitat QA/QC.....	6-30
6.1.6	Setting – Lake Habitat	6-30

6.1.6.1	Fish Habitat – Physical Characteristics	6-30
6.1.6.2	Fish Habitat – Biological Resources	6-35
6.1.7	Setting – Stream Habitat	6-38
6.1.7.1	Fish Habitat – Physical Characteristics	6-38
6.1.7.2	Fish Habitat – Biological Resources	6-43
6.1.8	Synthesis of Existing Environment and Baseline Information	6-46
6.2	Incorporation of Traditional Knowledge (TK).....	6-46
6.2.1	Incorporation of TK for Existing Environment and Baseline Information	6-46
6.2.2	Incorporation of TK for VEC and VSEC Selection.....	6-48
6.2.3	Incorporation of TK for Spatial and Temporal Boundaries	6-49
6.2.4	Incorporation of TK for Mitigation and Adaptive Management	6-49
6.3	Valued Components	6-49
6.3.1	Potential Valued Components and Scoping	6-49
6.3.2	Valued Components included in Assessment	6-49
6.4	Spatial and Temporal Boundaries.....	6-50
6.4.1	Spatial Boundaries.....	6-50
6.4.1.1	Local Study Area	6-50
6.4.1.2	Regional Study Area	6-53
6.4.2	Temporal Boundaries	6-53
6.5	Potential Project-Related Effects Assessment	6-53
6.5.1	Methodology Overview	6-53
6.5.1.1	Determining the Magnitude and Significance of Residual Effects ..	6-54
6.5.2	Potential Interactions with Project and Characterization	6-54
6.5.2.1	Loss of Fish Habitat: Project Infrastructure Footprint	6-56
6.5.2.2	Loss of Fish Habitat: Water Use	6-62
6.5.2.3	Deposition of Deleterious Substances	6-63
6.5.3	Identification of Mitigation and Management Measures	6-63
6.5.3.1	Loss of Fish Habitat: Project Infrastructure Footprint	6-63
6.5.3.2	Loss of Fish Habitat: Water Use	6-64
6.5.3.3	Deposition of Deleterious Substances	6-65
6.5.4	Characterization of Residual Effects.....	6-67
6.5.5	Significance of Residual Effects.....	6-67
6.6	Potential Cumulative Effects Assessment	6-67
6.6.1	Methodology Overview	6-67
6.6.2	Potential Interactions of Residual Effects with Other Projects	6-67
6.7	Transboundary Effects.....	6-67
6.8	Mitigative and Adaptive Management	6-67
6.9	Proposed Monitoring Programs	6-71
6.9.1	Aquatic Effects Monitoring Plan	6-71
6.9.2	Conceptual Fish Offsetting Plan	6-71
6.10	Impact Statement for Fish/Aquatic Habitat	6-72

7.	Freshwater Fish Community	7-1
7.1	Existing Environment and Baseline Information	7-1
7.1.1	Overview and Regional Setting	7-1
7.1.2	Regulatory Framework	7-3
7.1.2.1	The Fisheries Act	7-3
7.1.2.2	Metal Mining Effluent Regulations	7-4
7.1.3	Proximity to Designated Environmental Areas	7-5
7.1.4	Baseline Study Area	7-5
7.1.5	Baseline Studies	7-5
7.1.5.1	Information Sources	7-5
7.1.5.2	Baseline Study Methods	7-16
7.1.6	Fish Community Setting - Lakes and Ponds	7-18
7.1.7	Fish Community Setting - Streams	7-25
7.1.8	Metals in Fish Tissues	7-27
7.2	Incorporation of Traditional Knowledge (TK)	7-28
7.2.1	Incorporation of TK for Existing Environment and Baseline Information	7-28
7.2.2	Incorporation of TK for VEC and VSEC selection	7-30
7.2.3	Incorporation of TK for Spatial and Temporal Boundaries	7-31
7.2.4	Incorporation of TK for Mitigation and Adaptive Management	7-31
7.3	Valued Components	7-31
7.3.1	Potential Valued Components and Scoping	7-31
7.3.2	Valued Components included in Assessment	7-31
7.4	Spatial and Temporal Boundaries	7-32
7.4.1	Spatial Boundaries	7-32
7.4.1.1	Local Study Area	7-32
7.4.1.2	Regional Study Area	7-32
7.4.2	Temporal Boundaries	7-32
7.5	Potential Project-related Effects Assessment	7-35
7.5.1	Methodology Overview	7-35
7.5.2	Potential Interactions with Project and Characterization	7-36
7.5.2.1	Project Infrastructure Footprint	7-37
7.5.2.2	Water Use	7-38
7.5.2.3	Blasting	7-39
7.5.3	Identification of Mitigation and Management Measures	7-39
7.5.3.1	Project Infrastructure Footprint	7-40
7.5.3.2	Water Use	7-41
7.5.3.3	Blasting	7-42
7.5.4	Characterization of Residual Effects	7-44
7.5.5	Significance of Residual Effects	7-44
7.6	Potential Cumulative Effects Assessment	7-44
7.6.1	Methodology Overview	7-44

7.6.2	Potential Interactions of Residual Effects with Other Projects	7-44
7.7	Transboundary Effects	7-46
7.8	Mitigation and Adaptive Management	7-46
7.8.1	Mitigation by Project Design	7-46
7.8.2	Best Management Practices	7-46
7.8.3	Monitoring	7-47
7.9	Proposed Monitoring Programs	7-49
7.9.1	Aquatic Effects Monitoring Plan	7-49
7.9.2	Conceptual Fish Offsetting Plan	7-50
7.10	Impact Statement	7-50
References		R-1

List of Figures

FIGURE	PAGE
Figure 1.1-1. Regional Watersheds of the Back River Project	1-3
Figure 1.1-2. Regional Hydrometric Stations Relevant to the Study Area	1-5
Figure 1.1-3. A Typical Example of Discharge and Runoff in an Arctic Nival River (Atitok Creek near Dismal Lake, 1988), with Air Temperature and Precipitation	1-7
Figure 1.1-4. Historical Mean Monthly Unit Discharge Hydrographs of Regional and Project Stations ...	1-8
Figure 1.1-5. Monthly Distribution of Annual Runoff at Regional and Project Stations	1-9
Figure 1.1-6. Long-term Annual Runoff at Regional Hydrometric Stations	1-13
Figure 1.1-7. Ratio of Annual Runoff with Different Recurrence Periods to Mean Annual Runoff	1-15
Figure 1.1-8. Regional Regression Analysis between Instantaneous Peak Flow and Drainage Area	1-16
Figure 1.1-9. Regional Regression Analysis between June to September 7-Day Low Flow and Drainage Area	1-17
Figure 1.1-10. Study Area Drainage Basins - Goose Property Area	1-21
Figure 1.1-11. Annual Unit Hydrographs of Hydrometric Monitoring Stations - Goose Property Area	1-23
Figure 1.1-12. Study Area Drainage Basins - George Property Area	1-27
Figure 1.1-13. Annual Unit Hydrographs of Hydrometric Monitoring Stations - George Property Area ..	1-29
Figure 1.4-1. Spatial Boundaries of the Surface Water Hydrology Effects Assessment and Assessment Points within the Local Study Area and Regional Study Area	1-35
Figure 1.4-2. Surface Water Hydrology Assessment Points within the Local Study Area	1-37
Figure 2.1-1. Conceptual Sketch of Groundwater Flow Regimes in a Continuous Permafrost Environment	2-3

Figure 2.1-2. Regional Groundwater Context	2-5
Figure 2.1-3. Regional Groundwater Total Dissolved Solids and Major Ion Concentrations	2-7
Figure 2.1-4. Regional Groundwater Major Ion Concentrations	2-8
Figure 2.1-5. Geologic Structures at the Goose Property Area as Determined by Air Photo Interpretation	2-12
Figure 2.1-6. Groundwater Level Observations at the Goose Property Area	2-13
Figure 2.1-7. Hydraulic Conductivity Measurements at the Goose Property Area	2-16
Figure 2.1-8. Hydrogeologic Conceptual Model of the Goose Property Area: Cross-Section A-A' Llama Deposit Area	2-20
Figure 2.1-9. Hydrogeologic Conceptual Model of the Goose Property Area: Cross-Section B-B' Umwelt Deposit Area	2-21
Figure 2.1-10. Hydrogeologic Conceptual Model of the Goose Property Area: Cross-Section C-C' Main Deposit Area	2-22
Figure 2.1-11. Geologic Structures at the George Property Area as Determined by Exploration Drilling .	2-23
Figure 2.1-12. Groundwater Level Observations at the George Property Area.....	2-25
Figure 2.1-13. Hydrogeologic Conceptual Model of the George Property Area: Cross-Section D-D' Locale 1 Deposit Area.....	2-29
Figure 3.1-1. Project Location	3-2
Figure 3.1-2. Limnology and Bathymetry Sampling Conducted in the Goose Property Area for the Back River Project, 1994 to 2013.....	3-3
Figure 3.1-3. Limnology and Bathymetry Sampling Conducted in the George Property Area for the Back River Project, 2006 to 2013.....	3-5
Figure 3.1-4. Temperature Profiles of Goose Lake (Central Site), George Lake (Central Site), and Llama Lake in Ice-covered (April) and Open-water (August) Seasons, 2011 and 2012	3-12
Figure 3.1-5. Bathymetry of Goose Lake, Goose Property Area.....	3-15
Figure 3.1-6. Bathymetry of George Lake, George Property Area	3-16
Figure 4.1-1. Project Location	4-2
Figure 4.1-2. Waterbodies in the Goose Property Area.....	4-5
Figure 4.1-3. Waterbodies in the George Property Area	4-7
Figure 4.1-4. Locations of Baseline Lake and Stream Water Quality, Goose Property Area, 1993 to 2013.....	4-9
Figure 4.1-5. Locations of Baseline Lake and Stream Water Quality, George Property Area, 1997 to 2013.....	4-11

Figure 4.1-6. Dissolved Oxygen Concentrations in Lakes in Under-ice and Open-water Conditions in the Goose and George Property Areas, 2010 to 2013	4-19
Figure 4.4-1. Local Study Area and Regional Study Area for Freshwater Water Quality.....	4-33
Figure 5.1-1. Project Location	5-2
Figure 5.1-2. Locations of Baseline Lake and Stream Sediment Quality, Goose Property Area, 2007 to 2013.....	5-5
Figure 5.1-3. Locations of Baseline Lake and Stream Sediment Quality, George Property Area, 2007 to 2013.....	5-7
Figure 5.1-4. Sediment Arsenic Concentrations in Goose and George Property Area Lakes, Back River Project, 2007 to 2012	5-12
Figure 5.4-1. Local Study Area and Regional Study Area for Freshwater Sediment Quality.....	5-19
Figure 6.1-1. Project Location	6-2
Figure 6.1-2. Lake/Pond Fish Habitat Baseline Data (2010 - 2013) for the Goose Property Area	6-5
Figure 6.1-3. Lake/Pond Fish Habitat Baseline Data (2010 - 2013) for the George Property Area	6-7
Figure 6.1-4. Lake/Pond Fish Habitat - Aquatic Resources Baseline Data (1997 - 2013) for the Goose Property Area	6-13
Figure 6.1-5. Lake/Pond Fish Habitat - Aquatic Resources Baseline Data (2007 - 2013) for the George Property Area.....	6-15
Figure 6.1-6. Stream Fish Habitat Baseline Data (2010 - 2013) for the Goose Property Area	6-21
Figure 6.1-7. Stream Fish Habitat Baseline Data (2010 - 2013) for the George Property Area	6-23
Figure 6.1-8. Stream Fish Habitat - Aquatic Resources Baseline Data (1997 - 2013) for the Goose Property Area	6-25
Figure 6.1-9. Stream Fish Habitat - Aquatic Resources Baseline Data (2012 - 2013) for the George Property Area	6-27
Figure 6.4-1. Local Study Area and Regional Study Area for Freshwater Fish/Aquatic Habitat	6-51
Figure 6.5-1. Infrastructure Layout and Locations of Potential Habitat Loss, Goose Property Area ..	6-57
Figure 6.5-2. Infrastructure Layout and Locations of Potential Fish Habitat Loss, George Property Area	6-59
Figure 6.5-3. Daily Discharge and Wetted Depth at Goose Lake Outflow	6-66
Figure 7.1-1. Lake/Pond Fish Community Baseline Data (2010 to 2013), Goose Property Area	7-7
Figure 7.1-2. Lake/Pond Fish Community Baseline Data (2011 to 2013), George Property Area	7-9
Figure 7.1-3. Stream Fish Community Baseline Data (2011 to 2013), Goose Property Area	7-11
Figure 7.1-4. Stream Fish Community Baseline Data (2012 to 2013), George Property Area	7-13
Figure 7.1-5. Baseline Relative Abundance by Gillnet, Goose Property Area.....	7-20

Figure 7.1-6. Baseline Relative Abundance by Beach Seine, Goose Property Area	7-21
Figure 7.1-7. Baseline Relative Abundance by Gillnet, George Property Area	7-23
Figure 7.1-8. Baseline Relative Abundance by Beach Seine, George Property Area.....	7-24
Figure 7.4-1. Local Study Area and Regional Study Area for Lake Trout and Arctic Grayling.....	7-33
Figure 7.5-1. Daily Discharge and Wetted Depth at Goose Lake Outflow	7-43

List of Tables

TABLE	PAGE
Table 1.1-1. Regional Water Survey of Canada and Other Regional Stations Relevant to the Study Area.....	1-1
Table 1.1-2. Annual Runoff and Seasonal Distribution of Water Survey of Canada and other Regional Stations	1-11
Table 1.1-3. Estimated Annual Runoff (mm) based on Frequency Analysis for Regional Hydrometric Stations	1-12
Table 1.1-4. Estimated Instantaneous Peak Flows at Regional Hydrometric Stations.....	1-18
Table 1.1-5. Estimated 7-Day Low Flows during June to September at Regional Hydrometric Stations .	1-18
Table 1.1-6. Hydrometric Monitoring Stations in the Goose Property Area.....	1-20
Table 1.1-7. Peak Flows and Low Flows in the Goose Property Area	1-24
Table 1.1-8. Annual Runoff and Seasonal Distribution in the Goose Property Area	1-25
Table 1.1-9. Hydrometric Monitoring Stations in the George Property Area	1-25
Table 1.1-10. Peak Flows and Low Flows in the George Property Area.....	1-26
Table 1.1-11. Annual Runoff and Seasonal Distribution in the George Property Area	1-26
Table 1.3-1. Surface Water Hydrology Valued Ecosystem Component Indicators.....	1-34
Table 1.4-1. Effect Assessment Points within the Local Study Area and Regional Study Area	1-39
Table 1.4-2. Proposed Water Withdrawal Volumes from Goose, Propeller, and George Lake.....	1-40
Table 1.5-1. Surface Water Hydrology VEC Indicators and Magnitude Categories	1-42
Table 1.5-2. Effects of the Project on Streamflows and Lake Volumes (Percent Change from Baseline Conditions) at Assessment Points within the LSA and RSA	1-47
Table 1.5-3. Summary of Residual Effects on Surface Water Hydrology and Overall Significance Rating.....	1-50
Table 1.8-1. Surface Water Hydrology Mitigation and Management Measures	1-52
Table 2.1-1. Common Regional Overburden Materials and Their Hydrogeologic Properties	2-1

Table 2.1-2. Overburden Materials Common at the Goose Property and their Hydrogeologic Properties.....	2-11
Table 2.1-3. Groundwater Quality Parameters Measured for the Umwelt Westbay Sub-permafrost Monitoring System.....	2-17
Table 2.1-4. Overburden Materials Common at the George Property and their Hydrogeologic Properties.....	2-24
Table 2.1-5. Hydraulic Conductivity Measurements at the George Property Area.....	2-27
Table 3.1-1. Baseline Lake Limnology Sampling Conducted for the Back River Project.....	3-9
Table 3.1-2. Baseline Stream Temperatures Collected for the Back River Project.....	3-11
Table 3.1-3. Summary of Secchi Depths in George and Goose Property Area Lakes, Back River Project ..	3-13
Table 3.1-4. Summary of Lake Morphologies in George and Goose Property Areas, Back River Project ...	3-13
Table 3.1-5. Summary of Stream Water Temperatures in the George and Goose Property Areas, Back River Project, 1994 to 2013.....	3-14
Table 4.1-1. Baseline Lake Water Quality Sampling Conducted for the Back River Project, 1993 to 2013.....	4-13
Table 4.1-2. Baseline Stream Water Quality Sampling Conducted for the Back River Project, 1993 to 2013.....	4-15
Table 4.1-3. Summary of Lake Water Chemistry in the Goose and George Property Areas, 1993 to 2013.....	4-17
Table 4.1-4. Summary of Lake Water TSS and Turbidity in the Goose and George Property Areas, 1993 to 2013.....	4-18
Table 4.1-5. Summary of Lake Water Nutrient Concentrations in the Goose and George Property Areas, 1994 to 2013	4-20
Table 4.1-6. Distribution of Samples from Waterbodies by CCME Total Phosphorus Trigger Ranges, 1993 to 2013	4-21
Table 4.1-7. Summary of Lake Water Metal Concentrations in the Goose Property Area, 1993 to 2013.....	4-22
Table 4.1-8. Summary of Lake Water Metal Concentrations in the George Property Area, 1994 to 2013.....	4-22
Table 4.1-9. Water Quality Parameters with Sample Concentrations Greater than CCME Guideline Values in Goose Property Lakes, 1997 to 2013.....	4-23
Table 4.1-10. Water Quality Parameters with Sample Concentrations Greater than CCME Guideline Values in George Property Lakes, 1997 to 2013	4-24
Table 4.1-11. Summary of Lake Water Free Cyanide Concentrations (mg/L) in the Goose and George Property Areas, 1997 to 2013.....	4-24
Table 4.1-12. Summary of Stream Water Chemistry in the Goose and George Property Areas, 1993 to 2013.....	4-25

Table 4.1-13. Summary of Stream Water TSS and Turbidity in the Goose and George Property Areas, 1993 to 2013	4-25
Table 4.1-14. Stream Sites with Water Dissolved Oxygen Concentrations Less than the CCME Guideline for Early Life Stages in the Goose and George Property Areas, 1994 to 2013 ..	4-26
Table 4.1-15. Summary of Stream Water Nutrient Concentrations in the Goose and George Property Areas, 1994 to 2013	4-26
Table 4.1-16. Distribution of Samples from Streams by CCME Total Phosphorus Trigger Ranges, 1993 to 2013.....	4-27
Table 4.1-17. Summary of Stream Water Metal Concentrations in the Goose Property Area, 1993 to 2013.....	4-28
Table 4.1-18. Summary of Stream Water Metal Concentrations in the George Property Area, 1997 to 2013.....	4-28
Table 4.1-19. Water Quality Parameters with Sample Concentrations Greater than CCME Guideline Values in Goose Property Area Streams, 1993 to 2013	4-29
Table 4.1-20. Water Quality Parameters with Sample Concentrations Greater than CCME Guideline Values in George Property Area Streams, 1997 to 2013.....	4-30
Table 4.1-21. Summary of Stream Water Free Cyanide Concentrations (mg/L) in the Goose and George Property Areas, 1997 to 2013.....	4-30
Table 4.5-1. Rating Criteria for Evaluating the Magnitude of Residual Effects on Freshwater Water Quality VEC.....	4-36
Table 4.5-2. Definitions of Significance Ratings for Freshwater Water Quality VEC	4-36
Table 4.5-3. Freshwater Water Quality Indicators for Effects Assessment.....	4-37
Table 4.5-4. Indicators and Thresholds Used for Magnitude Characterization for Residual Effects Analysis on the VEC Freshwater Water Quality	4-37
Table 4.5-5. Definition of the Components of the Project's Interactions with the VEC Freshwater Water Quality	4-40
Table 4.5-6. Key Indicators of Project Activity Interactions with the Freshwater Environment for Effects Assessment	4-42
Table 4.5-7. Summary Table of Predicted Residual Effects and Overall Significance Rating	4-57
Table 4.8-1. Mitigation and Adaptive Management Measures for Potential Project Effects on Freshwater Water Quality	4-59
Table 4.11-1. Drinking Water Sources for Back River Project	4-63
Table 4.11-2. Baseline Metal Concentrations in Lakes Used as Drinking Water Source	4-65
Table 5.1-1. Summary of Lake Sediment Quality Sampling Conducted for the Back River Project.....	5-4
Table 5.1-2. Summary of Stream Sediment Quality Sampling Conducted for the Back River Project....	5-9

Table 5.1-3. Summary of Lake Sediment Particle Size Composition in the Goose and George LSA, 2007 to 2013.....	5-10
Table 5.1-4. Summary of Lake Sediment Total Organic Carbon Concentrations in the Goose and George LSA, 2007 to 2013.....	5-11
Table 5.1-5. Summary of Lake Sediment Metal Concentrations in the Goose LSA, 2010 to 2013	5-11
Table 5.1-6. Goose LSA Lakes with Sediment Metal Concentrations Greater than CCME Sediment Quality Guidelines, 2010 to 2013	5-13
Table 5.1-7. Summary of Lake Sediment Metal Concentrations in the George LSA, 2010 to 2013.....	5-13
Table 5.1-8. George LSA Lakes with Sediment Metal Concentrations Greater than CCME Sediment Quality Guidelines, 2010 to 2013	5-14
Table 5.1-9. Summary of Stream Sediment Particle Size Compositions in the Goose and George LSA, 2011 to 2013	5-15
Table 5.1-10. Summary of Stream Sediment Total Organic Carbon Concentrations in the Goose and George LSA, 2011 to 2013	5-15
Table 5.1-11. Summary of Stream Sediment Metals Concentrations in the Goose LSA, 2011 to 2013..	5-16
Table 5.1-12. Goose LSA Streams with Metal Concentrations Greater than CCME Sediment Quality Guidelines, 2011 to 2013.....	5-16
Table 5.1-13. Summary of Stream Sediment Metal Concentrations in the George LSA, 2011 to 2013 .	5-17
Table 5.1-14. George LSA Streams with Sediment Metal Concentrations Greater than CCME Sediment Quality Guidelines, 2010 to 2013	5-17
Table 5.5-1. Rating Criteria for Magnitude of Freshwater Sediment Quality Residual Effects	5-22
Table 5.5-2. Definitions of Significance Ratings of Residual Effects on the VEC Freshwater Sediment Quality	5-22
Table 5.5-3. The VEC Freshwater Sediment Quality Indicators for Effects Assessment	5-23
Table 5.5-4. Indicator Thresholds for the VEC Freshwater Sediment Quality	5-23
Table 5.5-5. Definition of the Components of the Project's Interactions with the VEC Freshwater Sediment Quality	5-25
Table 5.5-6. Key Indicators of Project Activity Interactions with the Freshwater Environment for Effects Assessment	5-27
Table 5.5-7. Summary Table of Predicted Residual Effects on the VEC Freshwater Sediment Quality and Overall Significance Rating	5-40
Table 5.8-1. Mitigation and Adaptive Management Measures for Potential Project Effects on Freshwater Sediment Quality	5-42
Table 6.1-1. Summary of Baseline Lake Phytoplankton Sampling Conducted at George and Goose Property Areas	6-11

Table 6.1-2. Summary of Baseline Lake Zooplankton Sampling Conducted at the Goose and George Property Areas	6-17
Table 6.1-3. Summary of Baseline Lake Benthos Sampling Conducted at the Goose and George Property Areas	6-17
Table 6.1-4. Overall Habitat Quality Rankings and Criteria	6-19
Table 6.1-5. Summary of Baseline Stream Periphyton Sampling Conducted for the Back River Project.....	6-19
Table 6.1-6. Summary of Baseline and Historical Stream Benthos Sampling Conducted for the Back River Project, 1997 to 2013.....	6-29
Table 6.1-7. Summary of Fish Habitat Quality in Goose Property Area Lakes and Ponds Surveyed between 2010 and 2013	6-32
Table 6.1-8. Summary of Fish Habitat Quality in George Property Area Lakes, 1990 and 2012.....	6-33
Table 6.1-9. Summary of Habitat Quality in Goose Property Area Streams, 1996 to 2012	6-40
Table 6.1-10. Summary of Habitat Quality in George Property Area Streams, 1990 to 2013	6-41
Table 6.5-1. Magnitude Rating for Evaluating Residual Effects on the VEC Freshwater Fish/Aquatic Habitat.....	6-54
Table 6.5-2. Definitions of Significance Ratings for the VEC Freshwater Fish/Aquatic Habitat	6-55
Table 6.5-3. Potential Interactions with the VEC Freshwater Fish/Aquatic Habitat	6-55
Table 6.5-4. Project activities and Phases interacting with the VEC Freshwater Fish/Aquatic Habitat.....	6-56
Table 6.5-5. Volume Limits to Water Use	6-64
Table 6.8-1. Mitigation and Management Measures Summary	6-69
Table 7.1-1. Life History Periodicity of Fish Species in the Back River Project Area	7-2
Table 7.1-2. Summary of Lakes Where Fish Sampling Occurred, 1990 to 2013.....	7-15
Table 7.1-3. Summary of Tissue Metal Samples and Locations, 2011 to 2013	7-17
Table 7.1-4. Fish Bearing Lakes and Ponds in the Goose Property LSA, 1997 to 2013	7-18
Table 7.1-5. Fish Bearing Lakes in the in the George Property, 1990 to 2013.....	7-22
Table 7.1-6. Summary of Fish Species Captured in Goose Property Streams, 2006 to 2013	7-26
Table 7.1-7. Summary of Fish Species Captured in George LSA Streams, 1990 to 2013	7-26
Table 7.5-1. Rating Criteria for Evaluating the Magnitude of Residual Effects on the VECs Lake Trout and Arctic Grayling	7-35
Table 7.5-2. Definitions of Significance Ratings for the VECs Lake Trout and Arctic Grayling	7-36
Table 7.5-3. Potential Interactions for Freshwater Fish Community VECs Lake Trout and Arctic Grayling	7-36

Table 7.5-4. Summary of Potential Interactions between Freshwater Fish Community and the Project .	7-37
Table 7.5-5. Volume Limits for Water Use	7-41
Table 7.5-6. Summary of Residual Effects and Significance Ratings for the VECs Lake Trout and Arctic Grayling	7-45
Table 7.6-1. Interaction of Freshwater Fish Community Residual Effects from the Back River Project .	7-45
Table 7.8-1. Summary of Mitigation and Management Measures for Lake Trout and Arctic Grayling .	7-48

List of Appendices

Appendix V6-1A. Back River Project: 2011 Hydrology Baseline Report
Appendix V6-1B. Back River Project: 2012 Hydrology Baseline Report
Appendix V6-1C. Investigating Impacts of the Proposed Development and Withdrawal at the Goose Property on Umwelt Lake Volume and Outflows
Appendix V6-1D. Investigating Impacts of the Proposed Development and Withdrawal at the Goose Property on Goose Lake Volume and Outflows
Appendix V6-1E. Investigating Impacts of the Proposed Development and Withdrawal at the Goose Property on Propeller Lake Volume and Outflows
Appendix V6-1F. Investigating Impacts of the Proposed Development and Withdrawal at the George Property on George Lake Volume and Outflows
Appendix V6-2A. Analytical Results of the Umwelt Westbay Groundwater Sampling Program
Appendix V6-2B. Completion Report, Westbay System Monitoring Well: 13-GSE-319
Appendix V6-2C. 2012 Geotechnical and Hydrogeological Drilling Program Factual Data Report
Appendix V6-2D. 2013 Geomechanical and Hydrogeological Site Investigation
Appendix V6-3A. Back River Project: 2010 Lake Water and Sediment Quality Baseline Report
Appendix V6-3B. Back River Project: 2011 Freshwater Baseline Report
Appendix V6-3C. Back River Project: 2012 Freshwater Baseline Report
Appendix V6-3D. Back River Project: Bathymetric Surveys of Lakes in the Goose and George Property Areas
Appendix V6-3E. Geophysical Survey — Sabina Back River Project
Appendix V6-6A. Back River Project: 2010 Fish and Fish Habitat Baseline Report
Appendix V6-6B. Back River Project: 2011 Fish and Fish Habitat Baseline Report
Appendix V6-6C. Back River Project: 2012 Fish and Fish Habitat Baseline Report

Volume 7: Marine Environment

Executive Summary	i
Table of Contents	xix
List of Figures	xxviii
List of Tables	xxx
List of Appendices	xxxiii
Acronyms and Abbreviations	xxxv
1. Physical Processes	1-1
1.1 Existing Environment and Baseline Information	1-1
1.1.1 General Bathurst Inlet Overview	1-1
1.1.1.1 Geographic Setting	1-1
1.1.1.2 Climate and Sea Ice Conditions	1-1
1.1.1.3 Winds and Riverine Discharge	1-2
1.1.2 Baseline Study Area	1-10
1.1.3 Proximity to Designated Environmental Areas	1-10
1.1.4 Baseline Study Methods	1-10
1.1.4.1 Information Sources	1-10
1.1.4.2 Ice Draft	1-10
1.1.4.3 Water Column Structure	1-15
1.1.4.4 Water Level and Tides	1-15
1.1.4.5 Light Attenuation and Euphotic Zone	1-15
1.1.4.6 Marine Currents	1-15
1.1.4.7 Marine Waves	1-16
1.1.5 Baseline Study Results	1-16
1.1.5.1 Ice Draft	1-16
1.1.5.2 Water Column Structure	1-16
1.1.5.3 Water Level and Tides	1-19
1.1.5.4 Light Attenuation and Euphotic Zone	1-23
1.1.5.5 Marine Currents	1-24
1.1.5.6 Marine Waves	1-26
1.1.6 Summary	1-28
1.1.6.1 Ice-covered Conditions.....	1-28
1.1.6.2 Open-water Conditions	1-28
1.2 Incorporation of Traditional Knowledge (TK).....	1-31
1.2.1 Incorporation of TK for Existing Environment and Baseline Information	1-31
1.2.2 Incorporation of TK for Valued Ecosystem Component (VEC) Selection	1-32
1.3 Valued Components	1-32
1.3.1 Potential Valued Components and Scoping	1-32

1.3.2	Valued Components Included in Assessment	1-32
2.	Marine Water Quality	2-1
2.1	Existing Environment and Baseline Information	2-1
2.1.1	Overview and Regional Setting	2-1
2.1.2	Proximity to Designated Environmental Areas	2-1
2.1.3	Baseline Study Area	2-3
2.1.4	Baseline Studies	2-3
2.1.4.1	Information Sources	2-3
2.1.5	Marine Water Quality	2-7
2.1.5.1	pH.....	2-7
2.1.5.2	Total Suspended Solids and Turbidity	2-7
2.1.5.3	Dissolved Oxygen.....	2-7
2.1.5.4	Nutrients	2-8
2.1.5.5	Metals	2-12
2.2	Incorporation of Traditional Knowledge (TK).....	2-14
2.2.1	Incorporation of TK for Existing Environment and Baseline Information	2-14
2.2.2	Incorporation of TK for VEC and VSEC Selection.....	2-15
2.3	Valued Components	2-15
2.3.1	Potential Valued Components and Scoping	2-15
2.4	Spatial and Temporal Boundaries.....	2-15
2.4.1	Spatial Boundaries.....	2-15
2.4.1.1	Local Study Area	2-15
2.4.1.2	Regional Study Area	2-15
2.4.2	Temporal Boundaries	2-16
2.5	Potential Project-related Effects Assessment.....	2-16
2.5.1	Methodology Overview	2-16
2.5.1.1	Water Quality Indicators.....	2-19
2.5.2	Potential Interactions with Project and Characterization	2-20
2.5.2.1	Shipping Activities	2-24
2.5.2.2	Site Preparation, Construction, and Decommissioning Activities ..	2-24
2.5.2.3	Site Contact Water	2-25
2.5.2.4	Winter Roads.....	2-25
2.5.2.5	Fuels, Oils, and PAH	2-25
2.5.2.6	Treated Discharges	2-26
2.5.2.7	Dust Deposition.....	2-26
2.5.3	Identification of Mitigation and Management Measures	2-26
2.5.3.1	Shipping Activities	2-27
2.5.3.2	Site Preparation, Construction, and Decommissioning Activities ..	2-30
2.5.3.3	Site Contact Water	2-31
2.5.3.4	Winter Roads.....	2-32
2.5.3.5	Fuels, Oils, and PAH	2-32

2.5.3.6	Treated Discharges	2-33
2.5.4	Characterization of Residual Effects.....	2-34
2.5.4.1	Shipping Activities	2-34
2.5.4.2	Site Preparation, Construction, and Decommissioning Activities ..	2-35
2.5.4.3	Site Contact Water	2-37
2.5.5	Significance of Residual Effects.....	2-37
2.6	Potential Cumulative Effects Assessment	2-39
2.6.1	Methodology Overview	2-39
2.6.2	Potential Interactions of Residual Effects with Other Projects	2-39
2.7	Transboundary Effects.....	2-40
2.8	Mitigation and Adaptive Management	2-40
2.9	Proposed Monitoring Programs	2-43
2.9.1	Conceptual Aquatic Effects Management Plan	2-43
2.10	Impact Statement	2-44
3.	Marine Sediment Quality	3-1
3.1	Existing Environment and Baseline Information	3-1
3.1.1	Overview and Regional Setting.....	3-1
3.1.2	Proximity to Designated Environmental Areas	3-1
3.1.3	Baseline Study Area	3-3
3.1.4	Baseline Studies	3-4
3.1.4.1	Information Sources	3-4
3.1.5	Baseline Study Methods	3-4
3.1.5.1	Sediment Quality QA/QC	3-4
3.1.6	Marine Sediment Quality	3-4
3.1.6.1	Sediment Composition	3-7
3.1.6.2	Total Organic Carbon.....	3-7
3.1.6.3	Sediment Metals.....	3-8
3.1.6.4	Polycyclic Aromatic Hydrocarbons (PAHs)	3-10
3.2	Incorporation of Traditional Knowledge (TK).....	3-10
3.2.1	Incorporation of TK for Existing Environment and Baseline Information	3-10
3.2.2	Incorporation of TK for VEC and VSEC selection	3-11
3.3	Valued Components	3-11
3.3.1	Valued Components Included in Assessment	3-11
3.4	Spatial and Temporal Boundaries.....	3-11
3.4.1	Spatial Boundaries.....	3-11
3.4.1.1	Local Study Area	3-11
3.4.1.2	Regional Study Area	3-12
3.4.2	Temporal Boundaries	3-12
3.5	Potential Project-related Effects Assessment.....	3-12
3.5.1	Methodology Overview	3-12
3.5.1.1	Sediment Quality Indicators.....	3-16

3.5.2	Potential Interactions with Project and Characterization	3-17
3.5.2.1	Shipping Activities	3-19
3.5.2.2	Site Preparation, Construction, and Decommissioning Activities ..	3-20
3.5.2.3	Site Contact Water	3-21
3.5.2.4	Fuels, Oils, and PAHs.....	3-21
3.5.2.5	Treated Wastewater Discharge.....	3-21
3.5.2.6	Dust Deposition.....	3-22
3.5.3	Identification of Mitigation and Management Measures	3-22
3.5.3.1	Shipping Activities	3-23
3.5.3.2	Site Preparation, Construction, and Decommissioning Activities ..	3-24
3.5.3.3	Site Contact Water	3-25
3.5.3.4	Fuels, Oils, and PAHs.....	3-25
3.5.3.5	Treated Wastewater Discharge.....	3-26
3.5.4	Characterization of Residual Effects.....	3-27
3.5.4.1	Shipping Activities	3-27
3.5.4.2	Site Preparation, Construction, and Decommissioning Activities ..	3-27
3.5.4.3	Site Contact Water	3-28
3.5.5	Significance of Residual Effects.....	3-29
3.6	Potential Cumulative Effects Assessment.....	3-29
3.6.1	Methodology Overview	3-29
3.6.2	Potential Interactions of Residual Effects with Other Projects	3-31
3.7	Transboundary Effects.....	3-31
3.8	Mitigation and Adaptive Management	3-31
3.9	Proposed Monitoring Programs	3-35
3.9.1	Conceptual Aquatic Effects Management Plan	3-35
3.10	Impact Statement	3-35
4.	Marine Fish/Aquatic Habitat	4-1
4.1	Existing Environment and Baseline Information	4-1
4.1.1	Overview and Regional Setting.....	4-1
4.1.2	Regulatory Framework	4-1
4.1.2.1	The Fisheries Act.....	4-1
4.1.2.2	Metal Mining Effluent Regulations	4-3
4.1.3	Proximity to Designated Environmental Areas	4-4
4.1.4	Baseline Study Area	4-4
4.1.5	Baseline Studies	4-7
4.1.5.1	Information Sources	4-7
4.1.5.2	Baseline Study Methods.....	4-8
4.1.5.3	Fish/Aquatic Habitat QA/QC.....	4-20
4.1.6	Setting - Marine Habitat.....	4-20
4.2	Incorporation of Traditional Knowledge (TK).....	4-30
4.2.1	Incorporation of TK for Existing Environment and Baseline Information	4-30

4.2.2	Incorporation of TK for VEC and VSEC Selection.....	4-33
4.2.3	Incorporation of TK for Spatial and Temporal Boundaries	4-33
4.2.4	Incorporation of TK for Mitigation and Adaptive Management	4-33
4.3	Valued Components	4-33
4.3.1	Potential Valued Components and Scoping	4-33
4.3.2	Valued Components included in Assessment	4-34
4.4	Spatial and Temporal Boundaries.....	4-35
4.4.1	Spatial Boundaries.....	4-35
4.4.1.1	Local Study Area	4-35
4.4.1.2	Regional Study Area	4-35
4.4.2	Temporal Boundaries	4-35
4.5	Potential Project-related Effects Assessment.....	4-36
4.5.1	Methodology Overview	4-36
4.5.1.1	Determining the Magnitude and Significance of Residual Effects ..	4-36
4.5.2	Potential Interactions with the Project and Characterization	4-39
4.5.2.1	Loss of Fish Habitat: Project Infrastructure Footprint	4-40
4.5.2.2	Loss of Fish Habitat: Shipping	4-41
4.5.2.3	Deposition of Deleterious Substances	4-41
4.5.3	Identification of Mitigation and Adaptive Management Measures	4-41
4.5.3.1	Loss of Fish Habitat: Project Infrastructure.....	4-42
4.5.3.2	Loss of Fish Habitat: Shipping	4-42
4.5.3.3	Deposition of Deleterious Substances	4-43
4.5.4	Characterization of Residual Effects.....	4-43
4.6	Potential Cumulative Effects Assessment	4-43
4.6.1	Methodology Overview	4-43
4.6.2	Potential Interactions of Residual Effects with Other Projects	4-43
4.7	Transboundary Effects.....	4-43
4.8	Mitigative and Adaptive Management	4-43
4.9	Proposed Monitoring Programs.....	4-46
4.9.1	Aquatic Effects Management Plan.....	4-46
4.9.2	Conceptual Fish Offsetting Plan	4-46
4.10	Impact Statement	4-46
5.	Marine Fish Community.....	5-1
5.1	Existing Environment and Baseline Information	5-1
5.1.1	Overview and Regional Setting.....	5-1
5.1.2	Regulatory Framework	5-2
5.1.2.1	The Fisheries Act.....	5-2
5.1.2.2	Metal Mining Effluent Regulations	5-5
5.1.3	Proximity to Designated Environmental Areas	5-6
5.1.4	Baseline Study Area	5-6
5.1.5	Baseline Studies	5-6

5.1.5.1	Information Sources	5-6
5.1.5.2	Baseline Study Methods	5-6
5.1.6	Baseline Study Results	5-7
5.1.6.1	Fish Community	5-7
5.1.6.2	Fish Biology	5-10
5.1.6.3	Metals in Fish Tissue	5-10
5.1.6.4	Polycyclic Aromatic Hydrocarbons (PAH)	5-10
5.2	Incorporation of Traditional Knowledge (TK)	5-12
5.2.1	Incorporation of TK for Existing Environment and Baseline Information	5-12
5.2.2	Incorporation of TK for VEC and VSEC Selection	5-14
5.2.3	Incorporation of TK for Spatial and Temporal Boundaries	5-14
5.2.4	Incorporation of TK for Mitigation and Adaptive Management	5-14
5.3	Valued Components	5-15
5.3.1	Potential Valued Components and Scoping	5-15
5.3.2	Valued Components Included in Assessment	5-15
5.4	Spatial and Temporal Boundaries	5-16
5.4.1	Spatial Boundaries	5-16
5.4.1.1	Local Study Area	5-16
5.4.1.2	Regional Study Area	5-16
5.4.2	Temporal Boundaries	5-16
5.5	Potential Project-related Effects Assessment	5-19
5.5.1	Methodology Overview	5-19
5.5.1.1	Determining the Magnitude and Significance of Residual Effects ..	5-19
5.5.2	Potential Interactions with the Project and Characterization	5-20
5.5.2.1	Project Infrastructure Footprint	5-20
5.5.2.2	Shipping Activities	5-22
5.5.3	Identification of Mitigation and Adaptive Management Measures	5-22
5.5.3.1	Project Infrastructure Footprint	5-23
5.5.3.2	Shipping Activities	5-23
5.5.4	Characterization of Residual Effects	5-25
5.5.5	Significance of Residual Effects	5-25
5.6	Potential Cumulative Effects Assessment	5-25
5.6.1	Methodology Overview	5-25
5.6.2	Potential Interactions of Residual Effects with other Projects	5-25
5.6.3	Identification of Mitigation and Management Measures	5-27
5.6.4	Characterization of Cumulative Residual Effects	5-27
5.6.5	Significance of Cumulative Residual Effects	5-27
5.7	Transboundary Effects	5-27
5.8	Mitigation and Adaptive Management	5-27
5.9	Proposed Monitoring Programs	5-31
5.9.1	Aquatic Effects Management Plan	5-31

5.9.2	Conceptual Fish Offsetting Plan	5-31
5.10	Impact Statement	5-31
6.	Seabirds and Seaducks.....	6-1
6.1	Existing Environment and Baseline Information	6-1
6.1.1	Introduction	6-1
6.1.2	Population Trends and Conservation.....	6-1
6.1.3	Habitat Use and Diet.....	6-2
6.1.4	Distribution and Movement Patterns.....	6-3
6.1.5	Baseline Information on Seabirds and Seaducks	6-4
6.1.5.1	Methods.....	6-4
6.1.5.2	Results	6-7
6.2	Incorporation of Traditional Knowledge (TK).....	6-13
6.2.1	Incorporation of TK for Existing Environment and Baseline Information	6-14
6.2.2	Incorporation of TK for VEC and VSEC Selection.....	6-14
6.2.3	Incorporation of TK for Spatial and Temporal Boundaries	6-15
6.2.4	Incorporation of TK for Effects Assessment.....	6-15
6.2.5	Incorporation of TK for Mitigation and Adaptive Management	6-15
6.3	Valued Components	6-16
6.3.1	Valued Components Included in Assessment	6-16
6.4	Spatial and Temporal Boundaries.....	6-17
6.4.1	Spatial Boundaries.....	6-17
6.4.1.1	Local Study Area	6-17
6.4.1.2	Regional Study Area	6-17
6.4.2	Temporal Boundaries	6-17
6.5	Project-related Effects Assessment	6-18
6.5.1	Methodology Overview	6-18
6.5.1.1	Indicators Used to Characterize Potential Residual Effects	6-18
6.5.1.2	Magnitude Ratings for Residual Effects	6-21
6.5.1.3	Overall Significance Ratings for Residual Effects	6-22
6.5.2	Potential Interactions with Project and Characterization	6-22
6.5.2.1	Habitat Alteration	6-24
6.5.2.2	Disturbance	6-25
6.5.2.3	Direct Mortality and Injury	6-28
6.5.2.4	Indirect Mortality	6-31
6.5.2.5	Exposure to Contaminants.....	6-31
6.5.2.6	Reduction in Reproductive Productivity	6-31
6.5.3	Identification of Mitigation and Management Measures	6-32
6.5.3.1	Mitigation for Habitat Alteration.....	6-32
6.5.3.2	Mitigation for Disturbance.....	6-33
6.5.3.3	Mitigation for Direct Mortality and Injury	6-33
6.5.3.4	Mitigation for Indirect Mortality.....	6-33

6.5.3.5	Mitigation for Exposure to Contaminants	6-33
6.5.4	Characterization of Residual Effects.....	6-34
6.5.4.1	Disturbance	6-34
6.5.4.2	Reduction in Reproductive Productivity	6-35
6.5.5	Significance of Residual Effects.....	6-35
6.6	Potential Cumulative Effects Assessment.....	6-35
6.6.1	Methodology Overview of Cumulative Effects.....	6-35
6.6.1.1	Spatial Boundaries for Cumulative Effects Assessment	6-37
6.6.1.2	Temporal Boundaries for Cumulative Effects Assessment	6-38
6.6.2	Potential Interactions of Residual Effects with other Projects	6-38
6.6.2.1	Disturbance	6-38
6.6.2.2	Reduction in Reproductive Productivity	6-40
6.6.3	Identification of Mitigation and Management Measures	6-43
6.6.4	Characterization of Cumulative Effects	6-43
6.6.4.1	Disturbance	6-43
6.6.4.2	Reduction in Reproductive Productivity	6-43
6.6.5	Significance of Cumulative Residual Effects.....	6-44
6.7	Transboundary Effects.....	6-44
6.8	Mitigation and Adaptive Management	6-44
6.8.1	Mitigation Measures	6-44
6.8.2	Mitigation by Project Design	6-47
6.8.3	Best Management Practices	6-47
6.8.4	Adaptive Management	6-47
6.8.5	Monitoring	6-47
6.8.6	Summary Table of Mitigation and Adaptive Management Measures.....	6-48
6.9	Proposed Monitoring Programs.....	6-49
6.9.1	Wildlife Mitigation and Monitoring Plan	6-50
6.9.1.1	Facility-specific Monitoring	6-50
6.9.1.2	Focal-species Monitoring	6-50
6.10	Impact Statement	6-50
6.11	Supporting and Supplemental Information.....	6-51
7.	Ringed Seals	7-1
7.1	Existing Environment and Baseline Information	7-1
7.1.1	Introduction	7-1
7.1.2	Population Trends and Conservation.....	7-1
7.1.3	Migration Patterns and Distribution.....	7-2
7.1.4	Habitat Use and Diet.....	7-3
7.1.5	Baseline Data for Ringed Seals	7-4
7.1.5.1	Methods.....	7-4
7.1.5.2	Results	7-5
7.2	Incorporation of Traditional Knowledge (TK).....	7-7

7.2.1	Incorporation of TK for Existing Environment and Baseline Information	7-9
7.2.2	Incorporation of TK for VEC and VSEC Selection.....	7-10
7.2.3	Incorporation of TK for Spatial and Temporal Boundaries	7-10
7.2.4	Incorporation of TK for Effects Assessment.....	7-10
7.2.5	Incorporation of TK for Mitigation and Adaptive Management	7-10
7.3	Valued Components	7-11
7.3.1	Potential Valued Components and Scoping	7-11
7.3.2	Valued Components Included in Assessment	7-12
7.4	Spatial and Temporal Boundaries.....	7-12
7.4.1	Spatial Boundaries.....	7-12
7.4.1.1	Local Study Area	7-12
7.4.1.2	Regional Study Area	7-12
7.4.2	Temporal Boundaries	7-15
7.5	Potential Project-related Effects Assessment.....	7-15
7.5.1	Methodology Overview	7-15
7.5.1.1	Indicators Used to Characterize Potential Residual Effects	7-15
7.5.1.2	Magnitude Ratings for Residual Effects	7-16
7.5.1.3	Overall Significance Ratings.....	7-17
7.5.2	Potential Interactions with Project and Characterization	7-17
7.5.2.1	Habitat Alteration	7-19
7.5.2.2	Disturbance	7-21
7.5.2.3	Mortality and/or Injury	7-30
7.5.2.4	Indirect Mortality	7-31
7.5.2.5	Exposure to Contaminants.....	7-32
7.5.2.6	Reduction in Reproductive Productivity	7-32
7.5.3	Identification of Mitigation and Management Measures	7-34
7.5.3.1	Mitigation for Habitat Alteration.....	7-34
7.5.3.2	Mitigation for Disturbance due to Noise	7-34
7.5.3.3	Mitigation for Mortality	7-35
7.5.3.4	Mitigation for Indirect Mortality.....	7-35
7.5.3.5	Mitigation for Exposure to Contaminants	7-35
7.5.4	Characterization of Residual Effects.....	7-36
7.6	Potential Cumulative Effects Assessment	7-36
7.7	Transboundary Effects.....	7-36
7.8	Mitigation and Adaptive Management	7-36
7.8.1	Mitigation by Project Design	7-38
7.8.2	Best Management Practices	7-38
7.8.3	Adaptive Management	7-38
7.8.4	Monitoring	7-38
7.8.5	Summary Table of Mitigation and Adaptive Management Measures.....	7-38
7.9	Proposed Monitoring Programs	7-40

7.9.1	Wildlife Mitigation and Monitoring Plan	7-41
7.9.1.1	Facility-specific Monitoring	7-41
7.9.1.2	Focal-species Monitoring	7-41
7.10	Impact Statement	7-42
7.11	Supporting and Supplemental Information.....	7-42
References.....		R-1

List of Figures

FIGURE	PAGE
Figure 1.1-1. Bathurst Inlet Bathymetry and Geographic Setting.....	1-3
Figure 1.1-2. Back River Project Site Layout	1-5
Figure 1.1-3. Average Canadian Arctic Ice Freeze-up and Break-up Dates, 1981 to 2010.....	1-7
Figure 1.1-4. Historical Weekly Ice Coverage in Selected Canadian Arctic Marine Waters, 2005 to 2013.....	1-8
Figure 1.1-5. Bathurst Inlet Yearly Wind Roses, 2007 to 2013.....	1-9
Figure 1.1-6. Physical Oceanographic Sampling Sites in Bathurst Inlet, 2001 to 2013	1-11
Figure 1.1-7. Sampling Locations for Physical Oceanography 2013 - Marine Laydown Area	1-13
Figure 1.1-8. Ice Draft Measurements in Southern Bathurst Inlet, May to July 2013	1-17
Figure 1.1-9. Scatterplot of All Temperature and Salinity Profiles Taken in Bathurst Inlet, 2001 to 2012.....	1-18
Figure 1.1-10. Temperature and Salinity Profiles at Stations BACK2012BI4 and BACK2012O654 near MLA in Southern Bathurst Inlet	1-20
Figure 1.1-11. Salinity and Temperature Contours along the Main Channel in Bathurst Inlet, Winter 2008	1-21
Figure 1.1-12. Water Level Measurements in Southern Bathurst Inlet, with Tidal and Non-tidal Components	1-22
Figure 1.1-13. Measured Current Roses at 3, 13 and 23 m Depths for Bathurst Inlet Sampling Stations, August - September 2012.....	1-25
Figure 1.1-14. Significant Wave Height, Maximum Wave Height and Peak Period Measured in Southern Bathurst Inlet, June to August 2013.....	1-27
Figure 1.1-15. Example of Bathurst Inlet Main Channel Estuarine Circulation during Winter: Vertical Side View	1-29
Figure 1.1-16. Example of Bathurst Inlet Main Channel Estuarine Circulation during Summer: Vertical Side View	1-30
Figure 2.1-1. Project Location	2-2

Figure 2.1-2. Baseline Marine Water Quality Sites, 2001 to 2013.....	2-5
Figure 2.1-3. Marine Water Column Dissolved Oxygen Profiles in the Local Study Area, July 2013	2-9
Figure 2.1-4. Seasonal Changes in Water Column Nutrient Concentrations in the Regional Study Area, 2001 to 2012	2-11
Figure 2.4-1. Local Study Area and Regional Study Area for Marine Water Quality	2-17
Figure 2.5-1. Modelled Wake Heights Generated by Ships	2-29
Figure 2.5-2. Depth Variation in Modelled Water Velocity Generated by Propeller Wash	2-36
Figure 3.1-1. Project Location	3-2
Figure 3.1-2. Baseline Marine Sediment Quality Sites, 2001 to 2013.....	3-5
Figure 3.4-1. Local Study Area and Regional Study Area for the VEC Marine Sediment Quality.....	3-13
Figure 4.1-1. Project Location	4-2
Figure 4.1-2. Project Site Layout for Marine Laydown Area	4-5
Figure 4.1-3. Bathymetric and Substrate Surveys at the Marine Laydown Area.....	4-9
Figure 4.1-4. Baseline Phytoplankton Sampling (2001 to 2013), Bathurst Inlet	4-13
Figure 4.1-5. Baseline Zooplankton Sampling (2001 to 2013), Bathurst Inlet.....	4-15
Figure 4.1-6. Baseline Benthic Invertebrate Sampling (2001 to 2013), Bathurst Inlet	4-17
Figure 4.1-7. Bathymetry around the Local and Regional Study Areas	4-21
Figure 4.1-8. Bathymetry around the Potential Development Area at the Marine Laydown Area	4-23
Figure 4.1-9. Substrate Type around the Potential Development Area at the Marine Laydown Area ..	4-27
Figure 4.4-1. Local Study Area and Regional Study Area for Marine Fish/Aquatic Habitat.....	4-37
Figure 5.1-1. Baseline Fish Community and Tissue Metal Sampling (2001 to 2013)	5-3
Figure 5.4-1. Local Study Area and Regional Study Area for Arctic Char	5-17
Figure 6.1-1. Transects Flown during Seabird and Seaduck Surveys in Bathurst Inlet, 2010 to 2012....	6-5
Figure 6.1-2. Flocks of Seabirds and Seaducks Documented in the Marine Wildlife Regional Study Areas, 2010 to 2012	6-11
Figure 6.4-1. Local Study Area and Regional Study Area for Seabirds/Seaducks.....	6-19
Figure 6.5-1. Seabird and Seaduck Habitat Altered or Disturbed due to the Project	6-29
Figure 6.6-1. Habitat Altered due to All Project Footprints and Noise within the Seabirds and Seaducks Cumulative Effects Assessment Boundary.....	6-41
Figure 6.11-1. Important Breeding and Staging Habitat for Seabirds and Seaducks along the Northwest Passage - Southern, Arctic Mainland	6-53

Figure 6.11-2. Important Breeding and Staging Habitat for Seabirds and Seaducks along the Northwest Passage - Northern, Arctic Islands	6-55
Figure 7.1-1. Transects for Ringed Seal Surveys Conducted in 2012 and 2013	7-6
Figure 7.1-2. Ringed Seal Pups, and Lairs Observed during Marine Mammal Aerial Surveys and Incidentally in 2012 and 2013	7-8
Figure 7.4-1. Local Study Area and Regional Study Area for Ringed Seals	7-13
Figure 7.5-1. Ringed Seal Habitat Altered or Disturbed due to the Project	7-27
Figure 7.11-1. Migratory Routes and Main Summering Areas of Whales along the Northwest Passage ..	7-45
Figure 7.11-2. Main Summering Areas of Seals, Walrus, and Polar Bears along the Northwest Passage .	7-47

List of Tables

TABLE	PAGE
Table 1.1-1. Marine Baseline Physical Processes Sampling Program, Bathurst Inlet 2001 to 2013.....	1-14
Table 1.1-2. Secchi and Euphotic Zone Depths Measured within Southern Bathurst Inlet	1-23
Table 2.1-1. Marine Baseline Water Quality Sampling Program in Bathurst Inlet, 2001 to 2013	2-4
Table 2.1-2. Summary of Marine Water Column TSS at LSA and RSA Sites, 2001 to 2013	2-8
Table 2.1-3. Summary of Marine Water Nitrogen Concentrations at LSA and RSA Sites, 2001 to 2013..	2-10
Table 2.1-4. Summary of Marine Water Phosphorus Concentrations at LSA and RSA Sites, 2001 to 2013.....	2-12
Table 2.1-5. Summary of Marine Water Metal Concentrations at LSA and RSA Sites, 2001 to 2013 ...	2-13
Table 2.1-6. Summary of Marine Water Quality Concentrations that were Greater than CCME Guidelines at LSA and RSA Sites, 2001 to 2013	2-14
Table 2.5-1. Rating Criteria for Evaluating the Magnitude of Residual Effects on Marine Water Quality .	2-19
Table 2.5-2. Definitions of Significance Ratings for Marine Water Quality VEC	2-19
Table 2.5-3. Marine Water Quality Indicators for Effects Assessment	2-20
Table 2.5-4. Indicator Thresholds for Marine Water Quality Effects Assessment	2-21
Table 2.5-5. Definition of the Components of the Project's Interactions with the VEC Marine Water Quality	2-22
Table 2.5-6. Key Indicators of Project Activity Interactions with the Marine Water Quality for the Effects Assessment	2-23
Table 2.5-7. Summary Table of Predicted Residual Effects on the VEC Marine Water Quality and Overall Significance Rating	2-38

Table 2.8-1. Mitigation and Adaptive Management Measures for Potential Project Effects on Marine Water Quality	2-40
Table 3.1-1. Marine Baseline Sediment Quality Sampling Program in Bathurst Inlet, 2001 to 2013	3-3
Table 3.1-2. Summary of Marine Sediment Compositions at LSA and RSA Sites, 2001 to 2013	3-7
Table 3.1-3. Summary of Marine Sediment Organic Carbon Concentrations at LSA and RSA Sites, 2001 to 2013.....	3-7
Table 3.1-4. Summary of Marine Sediment Metals Concentrations at LSA and RSA Sites, 2001 to 2013 ...	3-8
Table 3.1-5. Summary of Marine Sediment Quality Concentrations that were Greater than CCME Guidelines at LSA and RSA Sites, 2001 to 2013.....	3-9
Table 3.1-6. Local-scale Marine Baseline Sediment Quality Variation at LSA and RSA Sites	3-10
Table 3.5-1. Rating Criteria for Magnitude of Marine Sediment Quality Residual Effects.....	3-15
Table 3.5-2. Definitions of Significance Ratings for the VEC Marine Sediment Quality	3-15
Table 3.5-3. Marine Sediment Quality Indicators for Effects Assessment	3-16
Table 3.5-4. Indicator Thresholds for Marine Sediment Quality Effects Assessment	3-16
Table 3.5-5. Definition of the Components of the Project's Interactions with the VEC Marine Sediment Quality	3-18
Table 3.5-6. Key Indicators of Project Activity Interactions with the Marine Environment for Effects Assessment	3-19
Table 3.5-7. Summary Table of Predicted Residual Effects on the VEC Marine Sediment Quality and Overall Significance Rating.....	3-30
Table 3.8-1. Mitigation and Adaptive Management Measures for Potential Project Effects on the VEC Marine Sediment Quality	3-32
Table 4.1-1. Summary of Marine Physical Habitat Surveys Conducted in Bathurst Inlet, 2001 to 2013	4-8
Table 4.1-2. Marine Baseline Phytoplankton Sampling Program in Bathurst Inlet, 2001 to 2013	4-12
Table 4.1-3. Marine Baseline Zooplankton Sampling Program in Bathurst Inlet, 2001 to 2013	4-19
Table 4.1-4. Marine Baseline Benthos Sampling Program in Bathurst Inlet, 2001 to 2013	4-19
Table 4.5-1. Magnitude Rating for Evaluating Residual Effects on the VEC Marine Fish/Aquatic Habitat	4-36
Table 4.5-2. Definitions of Significance Ratings for the VEC Marine Fish/Aquatic Habitat	4-39
Table 4.5-3. Potential Interactions with the Marine VEC Fish/Aquatic Habitat.....	4-39
Table 4.5-4. Project Activities and Phases Interacting with the Marine Fish/Aquatic Habitat VEC ...	4-40
Table 4.8-1. Summary of Mitigation and Management Measures for Marine Fish/Aquatic Habitat	4-45
Table 5.1-1. Fish Species Captured or Presumed to Occur in Bathurst Inlet.....	5-7

Table 5.1-2. Summary of Metal and Polycyclic Aromatic Hydrocarbon (PAH) Concentrations in Shellfish Tissue Collected in Bathurst Inlet	5-11
Table 5.5-1. Rating Criteria for Evaluating the Magnitude of Residual Effects on the Marine Fish Community	5-19
Table 5.5-2. Rating Criteria for Evaluating the Significance of Residual Effects on the Marine Fish Community	5-20
Table 5.5-3. Potential Interactions for the VEC Arctic Char	5-21
Table 5.5-4. Summary of Potential Interactions between the VEC Arctic Char the Project	5-21
Table 5.5-5. Summary Table of Predicted Residual Effects and Overall Significance Rating on the VEC Arctic Char	5-26
Table 5.6-1. Interaction of Marine Fish Community Residual Effects from the Back River Project....	5-26
Table 5.6-2. Summary of Cumulative Residual Effects and their Significance on the VEC Arctic Char	5-29
Table 5.8-1. Summary of Mitigation and Management Measures for Marine Fish and Aquatic Habitat	5-30
Table 6.1-1. Seabird/Seaduck Species Recorded during Surveys or Incidentally in Bathurst Inlet, 2007 and 2010 to 2013.....	6-7
Table 6.1-2. Number of Seabirds and Seaducks recorded during Aerial Flight in June, 2007.....	6-8
Table 6.1-3. Number of Seabirds and Seaducks recorded on Aerial Surveys from 2010 to 2013	6-9
Table 6.4-1. Temporal Boundaries – Project Phase Durations	6-18
Table 6.5-1. Criteria and Indicators Used to Characterize Potential Effects on Seabirds and Seaducks ..	6-21
Table 6.5-2. Definitions of the Magnitude Ratings for Population Health Criterion	6-21
Table 6.5-3. Definitions of Significance Ratings for Residual Effects on Seabirds and Seaducks.....	6-22
Table 6.5-4. Potential Project-related Effects to Seabirds and Seaducks Related to Activities at the Marine Laydown Area and Shipping	6-23
Table 6.5-5. Summary of Residual Effects on Seabirds and Seaducks and Overall Significance Rating...	6-36
Table 6.6-1. Summary of Cumulative Residual Effects to Seabirds and Seaducks and their Significance.....	6-45
Table 6.8-1. Summary of Mitigation and Management Measures Applicable to Seabirds and Seaducks	6-48
Table 6.11-1. Breeding Areas for Seabirds and Seaducks along the Northwest Passage in the Southern and Northern Arctic	6-57
Table 7.1-1. Observed Ringed Seal Densities on Ice from Other Studies in the Alaskan and Canadian Arctic	7-2
Table 7.1-2. Survey Effort, Ringed Seal Abundance and Density in Bathurst Inlet 2004 to 2013.....	7-5

Table 7.4-1. Life of Project.....	7-15
Table 7.5-1. Criteria and Indicators Used to Characterize Residual Effects on Ringed Seals	7-16
Table 7.5-2. Definitions of the Magnitude Ratings for Residual Effects based on Population Health Criterion	7-16
Table 7.5-3. Definitions of Significance Ratings for Residual Effects on Ringed Seals	7-17
Table 7.5-4. Potential Project-related Effects to Ringed Seal Related to Activities at the Marine Laydown Area and Shipping	7-18
Table 7.5-5. Underwater Sound Pressure Levels (SPL) Determined for Potential Vessels Used for the Project	7-23
Table 7.8-1. Summary of Mitigation and Management Measures Applicable to Wildlife.....	7-39
Table 7.11-1. Spatial and Temporal Distribution of Marine Mammals along the Northwest Passage Shipping Route	7-43

List of Appendices

- Appendix V7-1A. Back River Project: 2012 Marine Baseline Report
- Appendix V7-2A. Preliminary Desalination Assessment at the Marine Laydown Area, Bathurst Inlet, NU
- Appendix V7-4A. Back River Project: 2012 Marine Fish and Fish Habitat Baseline Report

Page 91 of 127

1.4	Spatial and Temporal Boundaries.....	1-12
1.4.1	Spatial Boundaries.....	1-12
1.4.1.1	Local Study Area	1-12
1.4.1.2	Regional Study Area	1-15
1.4.1.3	Tibbitt to Contwoyto Winter Road Connector Assessment Area	1-15
1.4.2	Temporal Boundaries	1-15
1.5	Potential Project-related Effects Assessment.....	1-15
1.5.1	Methodology Overview	1-15
1.5.1.1	Literature Review.....	1-15
1.5.1.2	Archaeological Impact Assessments	1-15
1.5.2	Potential Interactions with Project and Characterization	1-16
1.5.2.1	Archaeological Sites within the Regional Study Area.....	1-16
1.5.2.2	Archaeological Sites within the Local Study Area.....	1-17
1.5.2.3	Archaeological Sites within the Tibbitt to Contwoyto Winter Road Connector Assessment Area.....	1-17
1.5.2.4	Archaeological Sites Directly Impacted by Development Components.....	1-17
1.5.3	Identification of Mitigation and Management Measures	1-28
1.5.3.1	Mitigation by Project Design	1-28
1.5.3.2	Best Management Practices	1-28
1.5.3.3	Adaptive Management	1-28
1.5.3.4	Site-specific Effects, Management, and Mitigation	1-29
1.5.3.5	Offsetting or Enhancement Heritage Resources Valued Socio-economic Component.....	1-30
1.5.4	Characterization of Residual Effects.....	1-30
1.5.4.1	Disturbance of Archaeological Sites	1-30
1.5.5	Significance of Residual Effects.....	1-30
1.5.5.1	Residual Effect Descriptors for Archaeological Sites	1-30
1.5.5.2	Disturbance of Known Archaeological Sites	1-32
1.5.5.3	Disturbance of Unknown Archaeological Sites	1-32
1.5.5.4	Overall Effect on Archaeological Sites	1-32
1.6	Potential Cumulative Effects Assessment.....	1-32
1.6.1	Methodology Overview	1-32
1.6.2	Potential Interactions of Residual Effects with Other Projects	1-33
1.6.3	Identification of Mitigation and Management Measures	1-33
1.6.4	Characterization of Cumulative Residual Effects.....	1-33
1.7	Transboundary Effects.....	1-33
1.8	Mitigation and Adaptive Management	1-33
1.8.1	Archaeological Sites.....	1-33
1.8.2	Summary Table of Mitigation and Adaptive Management Measures.....	1-33
1.9	Proposed Monitoring Programs	1-34
1.9.1	Cultural and Heritage Resources Protection Plan	1-35

1.10	Impact Statement	1-35
1.11	Supporting and Supplemental Information.....	1-35
2.	Paleontology	2-1
2.1	Existing Environment and Baseline Information	2-1
2.1.1	Territorial and Federal Legislation	2-1
2.1.2	Paleontology Background	2-1
2.1.3	Previous Paleontological Research in the Regional Study Area	2-2
2.2	Incorporation of Traditional Knowledge.....	2-2
2.3	Valued Components	2-2
2.3.1	Potential Valued Components and Scoping	2-2
2.3.2	Valued Components Included in Assessment	2-7
2.3.3	Supporting and Supplemental Information.....	2-7
3.	Socio-economics	3-1
3.1	Existing Environment and Baseline Information	3-1
3.1.1	Method	3-1
3.1.2	Results.....	3-1
3.1.2.1	Demographics.....	3-2
3.1.2.2	Employment.....	3-3
3.1.2.3	Education and Training	3-5
3.1.2.4	Economic Development	3-7
3.1.2.5	Business Opportunities	3-9
3.1.2.6	Infrastructure and Services	3-11
3.1.2.7	Health and Community Well-being	3-14
3.1.2.8	Summary.....	3-21
3.2	Incorporation of Traditional Knowledge (TK).....	3-22
3.2.1	Incorporation of TK for Existing Environment and Baseline Information	3-23
3.2.2	Incorporation of TK for VSEC Selection.....	3-23
3.2.3	Incorporation of TK for Spatial and Temporal Boundaries	3-23
3.2.4	Incorporation of TK for Effects Assessment.....	3-23
3.2.5	Incorporation of TK for Mitigation and Adaptive Management	3-23
3.3	Valued Components	3-24
3.3.1	Potential Valued Components and Scoping	3-24
3.3.2	Valued Components Included in Assessment	3-26
3.3.2.1	Valued Socio-economic Components Excluded from the Assessment.....	3-27
3.3.2.2	Potential Socio-economic Effects Included in the Assessment	3-31
3.3.2.3	Potential Socio-economic Effects Excluded from Further Assessment.....	3-32
3.3.3	Supporting and Supplemental Information.....	3-36
3.4	Spatial and Temporal Boundaries.....	3-36
3.4.1	Spatial Boundaries.....	3-36

3.4.2	Temporal Boundaries	3-37
3.5	Potential Project-related Effects Assessment.....	3-37
3.5.1	Methodology Overview	3-37
3.5.1.1	Identification of Residual Effects and Significance	3-39
3.5.2	Economic Impact Model	3-41
3.5.2.1	Method	3-41
3.5.2.2	Summary of Results.....	3-42
3.5.3	Potential Interactions with Project and Characterization	3-43
3.5.3.1	Economic Development	3-43
3.5.3.2	Business Opportunities	3-54
3.5.3.3	Employment.....	3-57
3.5.3.4	Education and Training	3-69
3.5.3.5	Health and Community Well-being	3-73
3.5.4	Identification of Mitigation and Management Measures	3-83
3.5.4.1	Economic Development	3-83
3.5.4.2	Business Opportunities	3-84
3.5.4.3	Employment.....	3-84
3.5.4.4	Education and Training	3-85
3.5.4.5	Health and Community Well-being	3-85
3.5.5	Characterization of Residual Effects.....	3-86
3.5.5.1	Economic Development	3-86
3.5.5.2	Business Opportunities	3-86
3.5.5.3	Employment.....	3-86
3.5.5.4	Education and Training	3-87
3.5.5.5	Health and Community Well-being	3-87
3.5.6	Significance of Residual Effects.....	3-88
3.5.6.1	Employment.....	3-89
3.5.6.2	Health and Community Well-being	3-89
3.6	Potential Cumulative Effects Assessment.....	3-92
3.6.1	Methodology Overview	3-92
3.6.1.1	Approach to the Cumulative Effects Assessment.....	3-93
3.6.1.2	Spatial and Temporal Boundaries Used for the Cumulative Effects Assessment	3-93
3.6.1.3	Scoping of Past, Existing, and Future Projects for Inclusion in the Cumulative Effects Assessment	3-93
3.6.2	Potential Interactions of Residual Effects with Other Projects	3-98
3.6.2.1	Employment.....	3-99
3.6.2.2	Health and Community Well-being	3-99
3.6.3	Identification of Mitigation and Management Measures	3-100
3.6.3.1	Employment.....	3-100
3.6.3.2	Health and Community Well-being	3-101
3.6.4	Characterization of Cumulative Residual Effects.....	3-101

3.6.4.1	Employment.....	3-102
3.6.4.2	Health and Community Well-being	3-102
3.6.5	Significance of Cumulative Residual Effects.....	3-103
3.6.5.1	Employment.....	3-103
3.6.5.2	Health and Community Well-being	3-105
3.7	Transboundary Effects.....	3-106
3.7.1	Potential VSECs and Effects included in the Transboundary Effects Assessment	3-106
3.7.2	Potential Transboundary Nature of Residual Effects.....	3-106
3.7.2.1	Employment.....	3-107
3.7.2.2	Health and Community Well-being	3-107
3.7.2.3	Other Potential Transboundary Effects	3-108
3.7.3	Identification of Mitigation and Management Measures	3-108
3.7.3.1	Employment.....	3-108
3.7.3.2	Community Well-being.....	3-109
3.7.4	Characterization of Residual Transboundary Effects.....	3-109
3.8	Mitigation and Adaptive Management	3-110
3.8.1	Business Development Plan.....	3-110
3.8.2	Community Involvement Plan	3-111
3.8.3	Human Resources Plan.....	3-111
3.8.4	Summary of Mitigation and Adaptive Management.....	3-112
3.9	Proposed Monitoring Programs.....	3-113
3.9.1	Socio-economic Monitoring Program	3-113
3.10	Impact Statement	3-115
4.	Land Use	4-1
4.1	Existing Environment and Baseline Information	4-1
4.1.1	Methods	4-1
4.1.2	Results.....	4-1
4.1.2.1	Nunavut Land Title and Tenure	4-1
4.1.2.2	Land Use Planning and Designation.....	4-2
4.1.2.3	Industrial Land Use	4-4
4.1.2.4	Commercial Activities.....	4-4
4.1.2.5	Subsistence Economy and Land Use	4-7
4.1.2.6	Regional Transportation	4-20
4.1.3	Summary	4-20
4.2	Incorporation of Traditional Knowledge (TK).....	4-21
4.2.1	Incorporation of TK for Existing Environment and Baseline Information	4-22
4.2.2	Incorporation of TK for Valued Socio-economic Component Selection	4-24
4.2.3	Incorporation of TK for Spatial and Temporal Boundaries	4-24
4.2.4	Incorporation of TK for Effects Assessment.....	4-24
4.2.5	Incorporation of TK for Mitigation and Adaptive Management.....	4-24

4.3	Valued Components	4-25
4.3.1	Potential Valued Components and Scoping	4-25
4.3.2	Valued Components Included in Assessment	4-26
4.3.2.1	Potential Land Use Effects Included in the Assessment.....	4-27
4.3.2.2	Potential Land Use Effects Excluded from Further Assessment	4-29
4.4	Spatial and Temporal Boundaries.....	4-31
4.4.1	Spatial Boundaries.....	4-31
4.4.2	Temporal Boundaries	4-31
4.5	Potential Project-related Effects Assessment.....	4-32
4.5.1	Methodology Overview	4-32
4.5.1.1	Identification of Residual Effects and Significance	4-32
4.5.2	Potential Interactions with Project and Characterization	4-36
4.5.2.1	Non-traditional Land and Resource Use.....	4-37
4.5.2.2	Subsistence Economy and Land Use	4-42
4.5.3	Identification of Mitigation and Management Measures	4-51
4.5.3.1	Non-traditional Land and Resource Use.....	4-51
4.5.3.2	Subsistence Economy and Land Use	4-52
4.5.4	Characterization of Residual Effects.....	4-53
4.5.4.1	Non-traditional Land and Resource Use.....	4-53
4.5.4.2	Subsistence Economy and Land Use	4-53
4.5.5	Significance of Residual Effects.....	4-55
4.5.5.1	Non-traditional Land and Resource Use.....	4-55
4.5.5.2	Subsistence Economy and Land Use	4-55
4.6	Potential Cumulative Effects Assessment	4-58
4.6.1	Methodology Overview	4-58
4.6.1.1	Approach to the Cumulative Effects Assessment.....	4-59
4.6.1.2	Spatial and Temporal Boundaries used for the Cumulative Effects Assessment	4-60
4.6.1.3	Scoping of Past, Existing, and Future Projects for Inclusion in the Cumulative Effects Assessment	4-60
4.6.2	Potential Interactions of Residual Effects with other Projects	4-64
4.6.2.1	Non-traditional Land and Resource Use.....	4-64
4.6.2.2	Subsistence Economy and Land Use	4-65
4.6.3	Identification of Mitigation and Management Measures	4-67
4.6.4	Characterization of Cumulative Residual Effects.....	4-68
4.6.4.1	Non-traditional Land and Resource Use.....	4-68
4.6.4.2	Subsistence Economy and Land Use	4-69
4.6.5	Significance of Cumulative Residual Effects.....	4-70
4.6.5.1	Non-traditional Land and Resource Use.....	4-70
4.6.5.2	Subsistence Economy and Land Use	4-70
4.7	Transboundary Effects.....	4-73

4.7.1	Potential Land Use Valued Socio-economic Components and Effects Included in the Transboundary Effects Assessment	4-74
4.7.2	Potential Transboundary Nature of Residual Effects.....	4-75
4.7.2.1	Subsistence Economy and Land Use	4-75
4.7.3	Identification of Mitigation and Management Measures	4-76
4.7.4	Characterization of Residual Transboundary Effects.....	4-76
4.7.4.1	Subsistence Economy and Land Use	4-76
4.8	Mitigation and Adaptive Management	4-77
4.8.1	Non-traditional Land and Resource Use	4-77
4.8.2	Subsistence Economy and Land Use	4-77
4.8.3	Summary Table of Mitigation and Adaptive Management Measures	4-78
4.9	Proposed Monitoring Programs	4-79
4.9.1.1	Non-traditional Land and Resource Use.....	4-79
4.9.1.2	Subsistence Economy and Land Use	4-79
4.10	Impact Statement	4-80
5.	Country Foods	5-1
5.1	Existing Environment and Baseline Information	5-1
5.1.1	Problem Formulation	5-2
5.1.1.1	Selection of Country Foods for Evaluation	5-2
5.1.1.2	Contaminants of Potential Concern Selected for Evaluation.....	5-3
5.1.1.3	Human Receptor Characteristics	5-3
5.1.2	Exposure Assessment	5-4
5.1.3	Toxicity Assessment.....	5-6
5.1.4	Risk Characterization	5-6
5.1.4.1	Estimation of Non-cancer Risks.....	5-7
5.1.4.2	Estimation of Cancer Risk	5-10
5.1.5	Uncertainty Analysis	5-11
5.1.6	Summary of Results for the Baseline Country Foods Risk Assessment	5-12
5.2	Incorporation of Traditional Knowledge (TK).....	5-12
5.2.1	Incorporation of TK for Existing Environment and Baseline Information	5-12
5.2.2	Incorporation of TK for VEC and VSEC Selection.....	5-13
5.2.3	Incorporation of TK for Spatial and Temporal Boundaries	5-14
5.2.4	Incorporation of TK for Effects Assessment.....	5-14
5.2.5	Incorporation of TK for Mitigation and Adaptive Management	5-15
5.3	Valued Components	5-15
5.3.1	Potential Valued Components and Scoping	5-15
5.3.2	Valued Components Included in Assessment	5-16
5.4	Spatial and Temporal Boundaries.....	5-16
5.4.1	Spatial Boundaries.....	5-16
5.4.1.1	Local Study Area	5-16
5.4.1.2	Regional Study Area	5-16

5.4.2	Temporal Boundaries	5-16
5.5	Potential Effects Assessment.....	5-19
5.5.1	Methodology Overview	5-19
5.5.2	Potential Interactions with Project and Characterization	5-21
5.5.2.1	Potential Interactions between Project Components or Activities and Country Foods	5-21
5.5.2.2	Characterization of Potential Effects to the Quality of Country Foods from Project Interactions	5-21
5.5.2.3	Potential Effects to Human Consumers of Country Foods	5-26
5.5.3	Identification of Mitigation and Management Measures	5-26
5.5.3.1	Mitigation and Management Strategies for Air Quality	5-27
5.5.3.2	Mitigation and Management Strategies for Freshwater Water Quality, Sediment Quality, and Fish.....	5-27
5.5.3.3	Mitigation and Management Strategies for Marine Water Quality, Fish, and Sediment Quality.....	5-29
5.5.3.4	Mitigation and Management Strategies for the Terrestrial Environment (Soil, Vegetation, and Wildlife).....	5-30
5.5.3.5	Mitigation and Management Strategies for Land Use	5-31
5.5.4	Characterization of Residual Effects.....	5-31
5.5.4.1	Qualitative Assessment of the Potential for Changes in Quality of Country Foods from Non-metal Contaminants	5-32
5.5.4.2	Quantitative Assessment of the Potential for Changes in Quality of Country Foods from Metals	5-35
5.5.4.3	Summary of the Potential for Residual Effects to Human Health Due to the Consumption of Country Foods	5-42
5.5.5	Significance of Residual Effects.....	5-43
5.6	Potential Cumulative Effects Assessment.....	5-43
5.7	Transboundary Effects.....	5-43
5.8	Mitigation and Adaptive Management	5-43
5.9	Impact Statement	5-44
5.10	Supporting and Supplemental Information.....	5-44
6.	Human Health and Environmental Risk Assessment	6-1
6.1	Existing Environment and Baseline Information	6-2
6.1.1	Air Quality	6-3
6.1.2	Freshwater and Sediment Quality	6-3
6.1.3	Marine Water and Sediment Quality	6-4
6.1.4	Freshwater Aquatic Resources and Fish	6-5
6.1.5	Marine Aquatic Resources, Fish, and Wildlife	6-6
6.1.6	Soil and Vegetation	6-8
6.1.7	Terrestrial Wildlife.....	6-10
6.1.8	Country Foods.....	6-11
6.1.9	Noise.....	6-12

6.2	Incorporation of Traditional Knowledge (TK).....	6-13
6.2.1	Incorporation of TK for Existing Environment and Baseline Information	6-13
6.2.2	Incorporation of TK for VEC and VSEC Selection.....	6-13
6.2.3	Incorporation of TK for Spatial and Temporal Boundaries	6-15
6.2.3.1	Inuit Camps near the Back River Project	6-15
6.2.3.2	Inuit Travel Routes near the Back River Project	6-16
6.2.3.3	Inuit Hunting and Fishing Areas	6-16
6.2.3.4	Inuit Drinking Water Collection Areas.....	6-17
6.2.4	Incorporation of TK for Effects Assessment.....	6-17
6.2.5	Incorporation of TK for Mitigation and Adaptive Management	6-17
6.3	Valued Components	6-18
6.4	Supporting and Supplemental Information.....	6-18
6.4.1	Environmental Risk Assessment (ERA) for Contaminants	6-18
6.4.1.1	Potential Valued Components and Scoping.....	6-19
6.4.1.2	Valued Components Included in the Assessment	6-20
6.4.1.3	Spatial Boundaries	6-22
6.4.1.4	Temporal Boundaries.....	6-24
6.4.1.5	Mitigation Measures	6-33
6.4.1.6	Identification of Disease Vectors.....	6-35
6.4.1.7	Problem Formulation and Pathway Analysis	6-36
6.4.1.8	Predictive Environmental Modelling and Assumptions	6-58
6.4.1.9	Screening Process for Contaminants of Potential Concern	6-70
6.4.1.10	Risk Assessment – Marine Environment.....	6-80
6.4.1.11	Risk Assessment – Terrestrial Wildlife.....	6-88
6.4.1.12	Uncertainties in the Environmental Risk Assessment.....	6-88
6.4.1.13	Conclusions of the Environmental Risk Assessment for Contaminants	6-89
6.4.2	Human Health Risk Assessment (HHRA) for Contaminants	6-89
6.4.2.1	Introduction to Human Health Risk Assessment	6-89
6.4.2.2	Potential Valued Components and Scoping for the HHRA	6-90
6.4.2.3	Valued Components Included in HHRA	6-90
6.4.2.4	Spatial Boundaries	6-91
6.4.2.5	Temporal Boundaries.....	6-92
6.4.2.6	Mitigation Measures	6-95
6.4.2.7	Problem Formulation and Pathway Analysis	6-97
6.4.2.8	Predictive Environmental Modelling.....	6-114
6.4.2.9	Screening Process for Contaminants of Potential Concern	6-123
6.4.2.10	Risk Assessment for Human Health due to Air Contaminants	6-134
6.4.2.11	Risk Assessment for Human Health Due to Drinking Water	6-142
6.4.2.12	Risk Assessment for Human Health Due to Country Foods Contaminants.....	6-142
6.4.2.13	Uncertainties in the Human Health Risk Assessment	6-142

6.4.2.14	Conclusions of Human Health Risk Assessment for Contaminants	6-143
6.4.3	Risk Assessment for Noise	6-144
6.4.3.1	Noise Assessment Methodology	6-144
6.4.3.2	Spatial Boundaries	6-144
6.4.3.3	Temporal Boundaries	6-145
6.4.3.4	Mitigation Measures	6-145
6.4.3.5	Sources of Project-related Noise	6-145
6.4.3.6	Receptor Locations	6-145
6.4.3.7	Receptor-Project Interactions	6-146
6.4.3.8	Method for Identifying Noise Levels of Concern	6-146
6.4.3.9	Noise Exposure Assessment	6-151
6.4.3.10	Potential Effects in Receptors from Noise	6-151
6.4.3.11	Significance of the Risk to Receptors from Noise	6-154
6.4.3.12	Conclusions of Human Health and Environmental Risk Assessment for Noise	6-156
6.4.4	Conclusions of the Human and Environmental Risk Assessment	6-156
6.4.4.1	Conclusions of the Environmental Risk Assessment for Contaminants	6-156
6.4.4.2	Conclusions of Human Health Risk Assessment for Contaminants	6-156
6.4.4.3	Conclusions of Human Health and Environmental Risk Assessment for Noise	6-157
References		R-1

List of Figures

FIGURE	PAGE
Figure 1.4-1. Local Study Area and Regional Study Area for Archaeology	1-13
Figure 2.1-1. Bedrock Geology for the Back River Paleontological Study Areas	2-3
Figure 3.4-1. Local Study Area and Regional Study Area Communities for Socio-economics	3-38
Figure 3.5-1. Predicted Economic Impacts of Construction on GDP in Canada by Year and by Province and Territory	3-45
Figure 3.5-2. Estimated Contribution to Federal and Provincial/Territorial Tax Revenues during Project Construction in Canada by Year and by Province and Territory	3-48
Figure 3.5-3. Operation and Construction Contributions to GDP for Nunavut and Canada	3-52
Figure 4.1-1. Land and Resource Use, Cambridge Bay (2012)	4-9
Figure 4.1-2. Land and Resource Use, Omingmaktok/Bathurst Inlet (2012)	4-11
Figure 4.1-3. Land and Resource Use, Kugluktuk (2012)	4-13
Figure 4.4-1. Local Study Area and Regional Study Area for Land Use	4-33

Figure 5.4-1. Country Foods Local and Regional Study Areas.....	5-17
Figure 5.5-1. Land and Resource Use of Inuit Populations (Bathurst Inlet, Omingmaktok, and Cambridge Bay) in relation to the Country Foods Local and Regional Study Area.....	5-23
Figure 6.4-1. Atmospheric Environment Local and Regional Study Areas	6-25
Figure 6.4-2. Freshwater Environment Local and Regional Study Areas	6-27
Figure 6.4-3. Marine Environment Local and Regional Study Areas	6-29
Figure 6.4-4. Terrestrial Environment Local and Regional Study Areas.....	6-31
Figure 6.4-5. Confirmed Fish-bearing Lakes and Ponds, Goose Property Area	6-41
Figure 6.4-6. Confirmed Fish-bearing Lakes and Ponds, George Property Area.....	6-43
Figure 6.4-7. Potential Environmental Receptor Exposure Pathways, Back River Project	6-48
Figure 6.4-8. Conceptual Model for Back River Project, Environmental Risk Assessment.....	6-59
Figure 6.4-9. Annual Dust Deposition, Goose Property Area.....	6-62
Figure 6.4-10. Annual Dust Deposition, George Property Area.....	6-63
Figure 6.4-11. Screening Process for Selection of Contaminants of Potential Concern.....	6-78
Figure 6.4-12. Human Health Risk Assessment Local and Regional Study Areas, Back River Project..	6-93
Figure 6.4-13. Tourist Receptors in Relation to the Human Health Local and Regional Study Areas of the Back River Project	6-103
Figure 6.4-14. Local Human Receptors in Relation to the Human Health Local and Regional Study Areas of the Back River Project.....	6-105
Figure 6.4-15. Potential Human Receptor Exposure Pathways, Back River Project	6-113
Figure 6.4-16. Conceptual Model for Back River Project, Human Health Risk Assessment.....	6-115

List of Tables

TABLE	PAGE
Table 1.5-1. Summary of Heritage Residual Effects and Overall Significance Rating	1-31
Table 1.8-1. Summary Table of Mitigation and Adaptive Management Measures	1-34
Table 2.1-1. Bedrock Geology Map Legend	2-5
Table 3.1-1. Labour Force Activity Characteristics of the Aboriginal Identity Population (2006)	3-4
Table 3.1-2. Annual Growth in Real Gross Domestic Product in Nunavut (2007 to 2011)	3-8
Table 3.3-1. Potential Effects to Population Demographics and Rationale for Exclusion	3-28
Table 3.3-2. Potential Effects to Community Infrastructure and Services and Rational for Exclusion ..	3-30

Table 3.3-3. Potential Socio-economic Effects of the Back River Project	3-31
Table 3.3-4. Potential Socio-economic Effects Excluded from the Assessment	3-33
Table 3.5-1. Summary of Attributes to Inform the Significance Rating of Effects	3-40
Table 3.5-2. Definitions of Magnitude Ratings for Socio-economic Effects	3-40
Table 3.5-3. Definitions of Significance Ratings for Socio-economic Effects	3-40
Table 3.5-4. Potential Socio-economic Effects of the Back River Project	3-43
Table 3.5-5. GDP Contributions of the Back River Project for Construction.....	3-44
Table 3.5-6. Direct, Indirect, and Induced Contributions to GDP during Construction for Nunavut...	3-46
Table 3.5-7. Project-induced Tax Revenues during Project Construction for Nunavut by Region	3-47
Table 3.5-8. GDP Contributions of the Back River Project for Operation	3-50
Table 3.5-9. Direct, Indirect, and Induced Contributions to GDP during Operation for Nunavut	3-50
Table 3.5-10. Project-induced Tax Revenues during Project Operation for Nunavut by Region	3-51
Table 3.5-11. Total GDP and Tax Impacts of the Operation of the Back River Project in Nunavut....	3-51
Table 3.5-12. Employment Effects of the Back River Project for Construction	3-58
Table 3.5-13. Total Employment Impacts of Construction for Nunavut by Region	3-59
Table 3.5-14. Income Effects of the Back River Project for Construction	3-60
Table 3.5-15. Employment Effects of the Back River Project for Operation	3-61
Table 3.5-16. Total Employment Impacts of Operation for Nunavut by Region	3-62
Table 3.5-17. Income Effects of the Back River Project for Operation	3-62
Table 3.5-18. Summary of Residual Effects and Overall Significance Rating for Employment	3-90
Table 3.5-19. Summary of Residual Effects and Overall Significance Rating for Health and Community Well-Being	3-90
Table 3.6-1. Past, Existing and Future Projects and Activities Whose Effects May Interact with Residual Effects of the Project	3-95
Table 3.6-2. Summary of Cumulative Residual Effects and Overall Significance Rating for Employment	3-104
Table 3.6-3. Summary of Cumulative Residual Effects and Overall Significance Rating for Community Well-being	3-104
Table 3.8-1. Summary Table of Mitigation and Adaptive Management Measures	3-112
Table 4.3-1. Potential Effects on Land Use Excluded from the Assessment	4-30
Table 4.5-1. Summary of Attributes to Inform the Significance Rating of Effects	4-35
Table 4.5-2. Definitions of Magnitude Ratings for Land Use Effects	4-35

Table 4.5-3. Definitions of Significance Ratings for Land Use Effects	4-36
Table 4.5-4. Summary of Residual Effects and Overall Significance Rating for Non-traditional Land and Resource Use	4-56
Table 4.5-5. Summary of Residual Effects and Overall Significance Rating for Subsistence Economy and Land Use	4-56
Table 4.6-1. Past, Existing and Future Projects and Activities Whose Effects May Interact with Residual Effects of the Project	4-61
Table 4.6-2. Summary of Cumulative Residual Effects and Overall Significance Rating for Non-traditional Land and Resource Use	4-71
Table 4.6-3. Summary of Cumulative Residual Effects and Overall Significance Rating for Subsistence Economy and Land Use	4-71
Table 4.8-1. Land Use Mitigation and Management Measures Summary	4-78
Table 5.1-1. Country Foods Hunted or Collected within the Project Land Use Local Study Area	5-2
Table 5.1-2. Human Receptor Characteristics Used in the Country Foods Baseline Risk Assessment ...	5-4
Table 5.1-3. Estimated Daily Intake of Contaminants of Potential Concern by Human Receptors	5-5
Table 5.1-4. Toxicity Reference Values for Contaminants of Potential Concern	5-7
Table 5.1-5. Human Exposure Ratios Based on Predicted and Measured Tissue Concentrations	5-8
Table 5.1-6. Recommended Maximum Weekly Intake and Number of Servings of Country Food	5-9
Table 5.1-7. Estimated Daily Lifetime Exposure and Incremental Lifetime Cancer Risk for Human Receptors Exposed to Arsenic in Country Foods	5-11
Table 5.4-1. Life of Project	5-16
Table 5.5-1. Definitions of the Magnitude Criterion for Country Foods Residual Effects	5-20
Table 5.5-2. Definitions of Significance Ratings for Effects to Human Health Due to Consumption of Country Foods	5-21
Table 5.5-3. Potential Project-related Sources of Contaminants in the Country Foods Local Study Area during Various Phases of the Project	5-22
Table 5.5-4. Relative Change in Predicted Mean Metal Concentrations Compared to Baseline Mean Metal Concentrations in Lakes within the Country Foods Local Study Area	5-37
Table 5.5-5. Relative Change in Predicted Mean Metal Concentrations Compared to Baseline Mean Metal Concentrations in Soil within the Country Foods Local Study Area	5-39
Table 5.5-6. Relative Change in Predicted Mean Metal Concentrations Compared to Baseline Mean Metal Concentrations in Vegetation within the Country Foods Local Study Area	5-41
Table 6.4-1. Valued Ecosystem Components Included as Receptors in the Environmental Risk Assessment	6-21

Table 6.4-2. Valued Ecosystem Components Excluded as Receptors in the Environmental Risk Assessment	6-22
Table 6.4-3. Potential Zoonotic Diseases in Nunavut and Their Vectors	6-36
Table 6.4-4. Receptor-Project Interactions and Their Rationale for Inclusion in the Environmental Risk Assessment	6-49
Table 6.4-5. Site-specific Biotransfer Factors for Soil to Lichen (<i>Cladina stygia</i> and <i>Stereocaulon paschale</i>) and Sedge (<i>Carex aquatilis</i>)	6-71
Table 6.4-6. Site-specific Biotransfer Factors for Soil to Bog Blueberry (<i>Vaccinium uliginosum</i>) and Bog Cranberry (<i>V. vitis-idaea</i>)	6-73
Table 6.4-7. Metals or other Contaminants of Potential Concern Measured or Assessed during Baseline Studies	6-75
Table 6.4-8. Lake Water Screening for Contaminants of Potential Concern for Sites within the Freshwater Environment Local Study Area	6-81
Table 6.4-9. Lake Freshwater Sediment Screening for Contaminants of Potential Concern for Sites within the Freshwater Environment Local Study Area	6-83
Table 6.4-10. Soil Screening for Contaminants of Potential Concern for Sites within the Terrestrial Local Study Area	6-85
Table 6.4-11. Vegetation Screening for Contaminants of Potential Concern for Sites within the Terrestrial Local Study Area	6-86
Table 6.4-12. Berries Screening for Contaminants of Potential Concern for Sites within the Terrestrial Local Study Area	6-87
Table 6.4-13. Human Receptor-Project Interactions and their Rationale for Inclusion in the Human Health Risk Assessment	6-109
Table 6.4-14. Screening of Baseline and Model Predictions of Criteria Air Contaminant Concentrations at George and Goose Camps	6-125
Table 6.4-15. Screening of Model Predictions of Metals in PM ₁₀	6-129
Table 6.4-16. Screening of Metal Concentrations in Lakes Used as a Drinking Water Source	6-131
Table 6.4-17. Surface Water Screening for Contaminants of Potential Concern for Lake Sites within the Human Health Risk Assessment Local Study Area	6-133
Table 6.4-18. Soil Screening for Contaminants of Potential Concern for Sites within the Human Health Risk Assessment Local Study Area	6-135
Table 6.4-19. Vegetation Screening for Contaminants of Potential Concern for Sites within the Human Health Risk Assessment Local Study Area	6-136
Table 6.4-20. Berries Screening for Contaminants of Potential Concern for Sites within the Country Foods Local Study Area	6-137
Table 6.4-21. Risk Characterization for Contaminants of Potential Concern in Air that Exceeded Guidelines at George and Goose Camps	6-140

Table 6.4-22. Human Receptor-Project Interactions Due to Noise and their Rational for Inclusion in the Human Health Risk Assessment	6-147
Table 6.4-23. Sound Levels of Familiar Noise Sources	6-149
Table 6.4-24. Baseline Noise Data of 24-Hour Logarithmic Average L_{eq} and L_{90} Noise Levels.....	6-150
Table 6.4-25. Project Noise Impact Criteria	6-154
Table 6.4-26. Noise Modelling Results for the George and Goose Camp Locations for Mining Operations Scenarios 1 and 2.....	6-155
Table 6.4-27. Noise Modelling Results for the George and Goose Camp Locations for Aviation Noise (Fixed Wing and Helicopter) Scenarios 3 and 4.....	6-155
Table 6.4-28. Noise Modelling Results for the George and Goose Camp Locations for Blasting Noise from Mining Operations Scenario 5	6-155

List of Appendices

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
Appendix V8-3A. Back River Project: 2012 Socio-economic and Land Use Baseline Report
Appendix V8-3B. Back River Project: 2013 Economic Impact Model Report
Appendix V8-5A. Back River Project: Country Foods Baseline Screening Level Risk Assessment
Appendix V8-6A. Predicted Metal Concentrations Associated with Fugitive Dust at George Property Area Sites
Appendix V8-6B. Predicted Metal Concentrations Associated with Fugitive Dust at Goose Property Area Sites
Appendix V8-6C. Predicted Metal Concentrations in Freshwater Lakes from Dust Deposition within the Freshwater Environment Local Study Area
Appendix V8-6D. Predicted Metal Concentrations in Freshwater Lake Sediment from Dust Deposition within the Freshwater Environment Local Study Area
Appendix V8-6E. Predicted Metal Concentrations in Soil from Dust Deposition for Sites within the Terrestrial Environment Local Study Area
Appendix V8-6F. Predicted Metal Concentrations in Lichen (<i>Cladina stygia</i> and <i>Stereocaulon paschale</i>) and Sedge (<i>Carex aquatilis</i>) due to Root Uptake of Metals from Soil and Direct Deposition of Metals in Dustfall for Sites within the Terrestrial Environment Local Study Area
Appendix V8-6G. Predicted Metal Concentrations in Bog Blueberry (<i>Vaccinium uliginosum</i>) and Bog Cranberry (<i>V. vitis-idaea</i>) due to Root Uptake of Metals and Direct Deposition of Metals in Dustfall for Sites within the Terrestrial Environment Local Study Area
Appendix V8-6H. Predicted Metal Concentrations in Lichen (<i>Cladina stygia</i> and <i>Stereocaulon paschale</i>) and Sedge (<i>Carex aquatilis</i>) for Sites within the Terrestrial Environment Local Study Area

Appendix V8-6I. Predicted Metal Concentrations in Bog Blueberry (*Vaccinium uliginosum*) and Bog Cranberry (*V. vitis-idaea*) for Sites within the Terrestrial Environment Local Study Area

Appendix V8-6J. Predicted Metal Concentrations in Air at George and Goose Camps

Appendix V8-6K. Predicted Water Quality in Lakes of the Goose and George Property Areas within the Human Health Risk Assessment Local Study Area due to Direct Deposition of Metals in Dustfall

Appendix V8-6L. Predicted Metal Concentrations in Soil from Dust Deposition for Sites within the Human Health Risk Assessment Local Study Area

Appendix V8-6M. Predicted Metal Concentrations in Lichen (*Cladonia stygia* and *Stereocaulon paschale*) and Sedge (*Carex aquatilis*) due to Root Uptake of Metals from Soil and Direct Deposition of Metals in Dustfall for Sites within the Human Health Risk Assessment Local Study Area

Appendix V8-6N. Predicted Metal Concentrations in Bog Blueberry (*Vaccinium uliginosum*) and Bog Cranberry (*V. vitis idaea*) due to Root Uptake of Metals and Direct Deposition of Metals in Dustfall for Sites within the Human Health Risk Assessment Local Study Area

Appendix V8-6O. Predicted Metal Concentrations in Lichen (*Cladonia stygia* and *Stereocaulon paschale*) and Sedge (*Carex aquatilis*) for Sites within the Human Health Risk Assessment Local Study Area

Appendix V8-6P. Predicted Metal Concentrations in Bog Blueberry (*Vaccinium uliginosum*) and Bog Cranberry (*V. vitis idaea*) for Sites within the Human Health Risk Assessment Local Study Area

Volume 9. Methodology, Effects of Environment on Project, Accidents and Malfunctions

Executive Summary	i
Table of Contents	xvii
List of Figures	xix
List of Tables	xx
List of Appendices	xx
1. General Methodology for Project Effects Assessment, Cumulative Effects Assessment, and Transboundary Effects Assessment	1-1
1.1 Introduction	1-1
1.2 Potential Project-related Effects Assessment Methodology	1-2
1.2.1 Effect Assessment Objectives	1-2
1.2.2 Baseline Information Collection	1-2
1.2.3 Establishing the Scope of the Effect Assessment	1-4
1.2.3.1 Selecting Valued Ecosystem Components and Valued Socio-economic Components	1-4
1.2.3.2 Assessment Boundaries	1-16
1.2.4 Effects Assessment Methodology	1-17
1.2.4.1 Identify Potential Interactions with Project and Valued Ecosystem Components/Valued Socio-economic Components	1-18
1.2.4.2 Characterization of Potential Effects	1-18
1.2.4.3 Identification of Mitigation and Management Measures	1-25
1.2.4.4 Characterization of Residual Effects	1-26
1.2.4.5 Determining the Significance of Residual Effects	1-26
1.3 Potential Cumulative Effects Assessment Methodology	1-33
1.3.1 Definitions and Conformity	1-33
1.3.2 Approach to Cumulative Effects Assessment	1-35
1.3.3 Types of Cumulative Effects	1-35
1.3.4 Establishing the Scope of the Cumulative Effects Assessment	1-37
1.3.4.1 Projects and Activities Considered	1-37
1.3.4.2 Summary of Other Projects	1-41
1.3.4.3 Assessment Boundaries	1-44
1.3.5 Potential Cumulative Effects, Mitigation, and Residual Effects	1-45
1.3.5.1 Identifying Potential Cumulative Effects	1-45
1.3.5.2 Implementing Mitigation Measures for Cumulative Effects	1-45
1.3.5.3 Summary of Cumulative Residual Effects	1-46
1.4 Potential Transboundary Effects Assessment Methodology	1-47
1.4.1 Inclusion of Valued Ecosystem Components/Valued Socio-economic Components for Potential Transboundary Effects Assessment	1-47

2.	Effects of Environment on Project Design	2-1
2.1	Introduction	2-1
2.2	Geotechnical Hazards.....	2-1
2.2.1	Slope Stability	2-1
2.2.2	Underground Stability	2-2
2.2.3	Frost Heave	2-2
2.2.4	Ice Scour	2-2
2.2.5	Coastal Erosion and Sea Level Trends	2-2
2.2.6	Seismic Activity	2-7
2.3	Unfavourable Geological Conditions	2-7
2.4	Permafrost.....	2-8
2.4.1	Thaw Settlement and Subsidence	2-8
2.5	Hydrological Conditions	2-8
2.6	Severe Weather Events.....	2-13
2.6.1	Extreme Precipitation Events	2-13
2.6.2	Peak Flow Analysis	2-13
2.6.3	Snow Drifts and Snow Banks.....	2-14
2.7	Sea Ice Conditions	2-14
2.8	Ice Ride-up and Pile-up	2-14
2.9	Isostatic Rebound.....	2-14
2.10	Climate Change	2-15
2.10.1	Historic Climate Change Patterns	2-15
2.10.2	Climate Change Predictions and Future Scenarios	2-15
2.10.3	Climate Change Prediction Uncertainties.....	2-16
2.11	Impacts of Climate change on Environmental Factors.....	2-16
2.11.1	Permafrost.....	2-16
2.11.2	Hydrological Regime	2-16
2.12	Sensitive Features	2-16
2.12.1	Sensitive Ecosystem Features	2-16
2.12.2	Sensitive Land Features	2-17
2.13	Effects of Climate Change on Mean and Extreme Climate Parameters.....	2-17
2.13.1	Mean Climate Parameters.....	2-17
2.13.2	Extreme Climate Parameters.....	2-18
2.14	Effects of Extreme Meteorological Events on the Project	2-18
2.14.1	Extreme Temperature and Precipitation Events.....	2-18
2.14.2	High Winds and Waves.....	2-19
2.14.3	Extreme Ocean Water Levels.....	2-19
2.14.4	White-out Conditions	2-20
2.15	Effects of Climate Change on Project Design	2-20
2.15.1	Ice Formation Timing	2-20
2.16	Closure and Climate change Long-term Effects.....	2-21

3.	Accidents and Malfunctions.....	3-1
3.1	Introduction	3-1
3.2	Risk Assessment.....	3-2
3.2.1	Risk Assessment Methodology	3-2
3.3	Risk Mitigation Measures	3-6
3.4	Construction Period	3-8
3.4.1	Fuel Spills	3-8
3.4.1.1	Spills of Diesel Fuel.....	3-8
3.4.1.2	Ship-to-shore Transfer of Fuel.....	3-9
3.4.1.3	Fuel Spill along the Shipping Route.....	3-9
3.4.2	Spill of Ammonium Nitrate and Explosives.....	3-10
3.4.3	Spill of Hazardous Chemicals other than Fuel.....	3-10
3.4.4	Discharge of Off-spec Effluent from Treatment Ponds	3-10
3.4.5	Power Outages	3-10
3.4.6	Fires.....	3-10
3.4.7	Accidental Explosions.....	3-10
3.4.8	Motor Vehicle Accidents.....	3-11
3.4.9	Weather Related Stranding	3-11
3.4.10	Aircraft Use.....	3-11
3.5	Operations Period	3-11
3.5.1	Failure of Containment Ponds.....	3-11
3.5.2	Waste Stockpiles Stability	3-11
3.5.3	Waste Water Release from the Tailings Impoundment Area.....	3-12
3.5.4	Tailings Pipeline Leakage	3-12
3.6	Closure Period and Post-closure Period	3-12
	References.....	R-1

List of Figures

FIGURE	PAGE
Figure 1.3-1. Steps to Cumulative Effects Assessment	1-36
Figure 1.3-2. Proximity of Past, Existing, and Reasonably Foreseeable Future Projects to the Back River Project.....	1-38

List of Tables

TABLE	PAGE
Table 1.2-1. Summary of Field-collected Baseline Information for the Back River Project.....	1-3

Table 1.2-2. Valued Ecosystem Component and Valued Socio-economic Component Scoping Process Information	1-7
Table 1.2-3. Valued Ecosystem Component and Valued Socio-economic Component Interaction with Project-Matrix	1-19
Table 1.2-4. Attributes Used to Evaluate Significance of Residual Effects.....	1-27
Table 1.2-5. Rating Criteria for Evaluating Residual Biophysical Effects	1-29
Table 1.2-6. Example Template of Summary of Residual Effects and Overall Significance Rating	1-30
Table 1.2-7. Rating Criteria for Evaluating Residual Socio-economic Effects	1-31
Table 1.3-1. Past, Existing, and Reasonably Foreseeable Future Projects with the Potential to Interact with the Back River Project.....	1-39
Table 1.3-2. Example Template for Interaction of Residual Effects from the Back River Project with Other Projects	1-44
Table 1.3-3. Example Template of Summary of Cumulative Residual Effects and their Significance ..	1-48
Table 2.2-1. Engineering Hazard Assessment - Goose and George Property Areas	2-3
Table 2.2-2. Engineering Hazard Assessment - All-weather Roads and Airstrip	2-9
Table 2.2-3. Engineering Hazard Assessment - Marine Laydown Area	2-10
Table 2.2-4. Summary of Probabilistic Seismic Hazard Analysis	2-13
Table 2.13-1. Climate Risk Matrix	2-18
Table 2.14-1. Wind and Wave Conditions	2-19
Table 2.15-1. Design Measures for Project Structures to Account for Climate Change	2-21
Table 3.2-1. Likelihood	3-2
Table 3.2-2. Consequence Severity	3-2
Table 3.2-3. Risk Matrix	3-3
Table 3.2-4. Major Accidents and Malfunctions Risk Summary	3-4

List of Appendices

Appendix V9-3A. 2013 Bathurst Inlet Marine Diesel Fuel Spill Modelling Report

Volume 10. Management Plans

1. Overall Environmental Management Plan
2. Environmental Protection Plan
3. Risk Management and Emergency Response Plan
4. Fuel Management Plan
5. Spill Contingency Plans
6. Oil Pollution Emergency Plan
7. Site Water Monitoring and Management Plan
8. Ore Storage Management Plan
9. Mine Waste Rock and Tailings Management Plan
10. Landfill and Waste Management Plan
11. Incineration Management Plan
12. Hazardous Materials Management Plan
13. Explosives Management Plan
14. Road Management Plan
15. Shipping Management Plan
16. Borrow Pits and Quarry Management Plan
17. Air Quality Monitoring and Management Plan
18. Noise Abatement Plan
19. Conceptual Aquatic Effects Management Plan
20. Wildlife Mitigation and Monitoring Plan
21. Draft Conceptual Fish Offsetting Plan (No Net Loss Plan)
22. Metal Leaching and Acid Rock Drainage Management Plan
23. Socio-economic Monitoring Plan
24. Business Development Plan
25. Occupational Health and Safety Plan
26. Community Involvement Plan
27. Cultural and Heritage Resources Protection Plan
28. Human Resources Plan
29. Mine Closure and Reclamation Plan

Volume 11. Type A Water Licence Application

Executive Summary	i
Table of Contents	lix
List of Figures	lxiv
List of Tables	lxiv
List of Appendices	lxv
Acronyms and Abbreviations	lxvii
1. Introduction	1-1
2. Minimum Application Requirements	2-1
2.1 General Water Licence Application	2-1
2.1.a Scope of the Type A Water Licence	2-1
2.2 Information Required to Satisfy the Requirements of the SIG	2-3
2.3 Executive Summary	2-3
2.4 Translated Executive Summary	2-4
2.5 Application Fee	2-4
2.6 Water Use Fee	2-4
2.7 SIG Concordance.....	2-4
2.8 Studies.....	2-4
3. General Water Licence Application	3-1
3.1 Application Form	3-1
3.2 Applicant Information	3-1
3.3 Applicant Representative and Information	3-1
3.3.a Representative Authorization Letter.....	3-1
3.3.b List of Officers of the Company and Evidence of Registration	3-1
3.3.c Financial Statement.....	3-1
3.4 Term of the Back River Project - Mine Sites Water Licence	3-1
4. Back River Project Description.....	4-1
4.1 Scope of the Back River Project Mine Sites Type A Water Licence.....	4-1
4.1.a Summary of Goose Property Infrastructure	4-1
4.1.b Summary George Property Infrastructure.....	4-8
4.1.c Potential Development Area	4-10
4.2 Detailed Description of the Facilities.....	4-10
4.2.a Raw Water Intake	4-10
4.2.a.1 Construction of the Propeller Lake Pump Station.....	4-11
4.2.a.2 Drilling Activities.....	4-11
4.2.b Water Storage and Treatment	4-11
4.2.c Existing Waterways and Anticipated Drainage Changes	4-11

4.2.d	Location of Proposed Receiving Waterways	4-11
4.2.e	Transportation Access Routes	4-12
4.2.e.1	Air Access.....	4-12
4.2.e.2	All-weather Site Roads.....	4-13
4.2.e.3	Stream Crossings	4-13
4.2.f	Location of Monitoring Sites.....	4-13
4.2.g	Traditional Water and Land Use	4-13
4.2.h	Sewage Treatment Facilities and Discharge	4-13
4.2.i	Wastewater Treatment and Discharge.....	4-14
4.2.i.1	Greywater	4-14
4.2.i.2	Oily Water Treatment Methods.....	4-14
4.2.j	Solid Waste Disposal and Drainage Patterns.....	4-14
4.2.k	Incinerator	4-15
4.2.l	Landfills and Landfarms	4-15
4.2.m	Waste Rock Storage Areas	4-15
4.2.m.1	Waste Rock Disposal	4-16
4.2.m.2	Goose Property Waste Rock Storage Areas	4-17
4.2.m.3	George Property Waste Rock Storage Areas.....	4-18
4.2.n	Ore Stockpiles	4-18
4.2.o	Tailings Impoundment Area	4-18
4.2.o.1	Site Selection	4-18
4.2.o.2	Design, Construction and Operation of the Tailings Impoundment Area	4-19
4.2.p	Laydown Areas	4-19
4.2.q	Quarries	4-20
4.2.q.1	Quarries/Borrow Sources and Overburden	4-20
4.2.r	Hazardous Waste Disposal	4-20
4.2.s	Waste Discharge Distribution Lines.....	4-23
4.2.t	Fuel and Chemical Storage	4-23
4.2.t.1	Fuel.....	4-23
4.2.t.2	Chemicals	4-24
4.2.u	Explosives Manufacturing and Storage.....	4-24
4.2.u.1	Explosives Storage	4-24
4.2.u.2	Emulsion Plant and Transportation to Work Sites.....	4-25
4.2.u.3	Ammonia Management	4-25
4.2.v	Abandoned and/or Restored Facilities	4-25
4.2.w	Existing On-site Infrastructure	4-25
4.2.x	Other - Mill	4-28
4.3	Mine Plan Overview	4-28
4.3.a	Summary of Operation Activities (Year 1 to 8.5) at Goose Property	4-28
4.3.b	Summary of Operation Activities (Year 1 to 10) at George Property	4-30

4.3.c	Location, Physical Nature, Geology, and Mineralogy	4-30
4.3.d	Mine Development	4-30
4.3.d.1	Mining Sequence	4-33
4.3.d.2	Open Pit Mining	4-34
4.3.d.3	Open Pit Design	4-35
4.3.d.4	Hydrogeological	4-35
4.3.d.5	Open Pit Mine Infrastructure.....	4-37
4.3.d.6	Underground Mining	4-37
4.3.d.7	Access and Decline Infrastructure	4-37
4.3.d.8	Backfilling	4-38
4.3.d.9	Underground Infrastructure	4-38
4.3.d.10	Hydrogeology	4-39
4.3.e	Existing Mining Operation	4-39
4.3.f	Mine Development Earthworks	4-39
4.3.g	Milling Operations	4-39
4.3.g.1	Crushing and Grinding.....	4-39
4.3.g.2	Leaching and Gold Recovery	4-40
4.3.g.3	Treatment of Leach Residue	4-40
4.3.g.4	Cyanide Destruction	4-40
4.3.g.5	Reagents.....	4-40
4.3.g.6	Mill Water Consumption	4-43
4.3.g.7	Storage and Transportation of Final Product	4-43
4.3.h	Production Rate.....	4-43
4.3.i	Project Life and Mine Life	4-43
4.3.j	Personnel and Population	4-44
4.4	Supplementary Technical Information.....	4-44
4.4.a	Technical Reports and Design Basis and Drawings.....	4-44
4.5	Management Plans and Reporting Requirements	4-44
4.5.a	Management Plans	4-44
4.5.b	Reporting Requirements	4-45
4.6	Conceptual Water Management Plans	4-46
4.6.a	Goose Property	4-46
4.6.b	George Property	4-46
5.	Baseline Information.....	5-1
5.1	Environmental Setting	5-1
5.2	Geology and Mineralogy	5-3
5.3	Fisheries.....	5-3
6.	Water Use and Water Management	6-1
6.1	Water Use	6-1
6.1.a	Water Management at the Goose Property	6-1

6.1.a.1	Goose Property Water Demand.....	6-2
6.1.a.2	Availability of Water during Winter and Exceptionally Low Flow Years	6-2
6.1.b	Water Management at the George Property.....	6-2
6.1.b.1	George Property Water Demand	6-3
6.1.b.2	Availability of Water during Winter and Exceptionally Low Flow Years	6-3
6.2	Water Use: Quality and Quantity	6-3
6.2.a	Water Intake	6-3
6.2.b	Location of Water Source	6-3
6.3	Water Storage at the Goose Property	6-3
6.4	Water Distribution.....	6-4
6.5	Water Crossings.....	6-4
6.6	Flood Control.....	6-4
6.7	Diversions	6-4
6.8	Alternation in Flow.....	6-5
6.8.a.1	Alterations to Drainage Patterns as a Result of Mining at the Goose Property	6-5
6.8.a.2	Alterations to Drainage Patterns as a Result of Mining at the George Property	6-6
6.9	Dewatering	6-7
6.9.a.1	Lake Dewatering	6-7
6.9.a.2	Mine Workings Dewatering	6-7
6.10	Proposed Water Works.....	6-8
6.11	Predicted Environmental Effects and Proposed Mitigation Measures	6-8
6.11.a	Fisheries.....	6-8
6.12	Studies.....	6-8
7.	Waste Disposal and Management	7-1
7.1	Waste Disposal	7-1
7.1.a	Sewage and Wastewater Management.....	7-3
7.1.b	General Waste Material	7-3
7.1.c	Hazardous Materials and Hazardous Waste Management Plan	7-3
7.1.d	Waste Rock Management Plan	7-4
7.1.e	Tailings Management	7-4
7.2	Waste Disposal Facilities	7-5
7.2.a	Waste Water Treatment and Disposal Facilities	7-5
7.2.a.1	Sewage Treatment Facilities.....	7-5
7.2.a.2	Oily Water Treatment Facilities.....	7-5
7.2.a.3	Contact Water from Secondary Containment	7-6
7.2.a.4	General Runoff from Construction Sites	7-6
7.2.a.5	Mine Contact Water	7-7
7.2.a.6	Underground Mine Dewatering at the Goose Property	7-7

7.2.a.7	Waste Rock Storage Area Runoff	7-8
7.2.a.8	Ore Stockpile Runoff	7-8
7.2.a.9	Tailings Impoundment Area Operation and Effluent Quality	7-8
7.2.a.10	Tailings Impoundment Area Seepage Control	7-8
7.2.b	Solid Waste Treatment and Disposal	7-9
7.2.b.1	Non-hazardous Solid Wastes Handling and Sorting	7-9
7.2.b.2	Temporary Storage of Waste	7-9
7.2.b.3	Incineration Systems	7-9
7.2.b.4	Open Burning	7-10
7.2.b.5	Landfill	7-10
7.2.b.6	Landfarms	7-11
7.2.c	Hazardous Solid Waste Disposal	7-11
7.2.d	Waste Rock Storage Areas	7-12
7.2.e	Tailings	7-12
7.2.e.1	Consolidated Tailings Chemistry	7-12
7.3	Predicted Environmental Effects and Proposed Mitigation Measures	7-12
7.4	Operations and Maintenance	7-14
7.5	Hazardous Materials	7-14
7.6	Emergency Response and Spill Contingency	7-14
7.7	Studies	7-15
7.8	Reclamation and Closure	7-15
8.	General Monitoring and Aquatic Effects Monitoring	8-1
8.1	General Monitoring	8-1
8.1.a	Monitoring of the Tailings Impoundment Area	8-2
8.2	Aquatic Effects Monitoring	8-3
9.	Project-specific Information Requirements (PSIR)	9-1
	References	R-1

List of Figures

FIGURE	PAGE
Figure 4-1. Back River Project Location	4-2
Figure 4.1-1. Project Development Area and Infrastructure Areas - Goose Property	4-3
Figure 4.1-2. Project Development Area and Infrastructure Areas - George Property	4-5
Figure 4.2-1. Tailings Impoundment Area and Dam - Conceptual Plan and Cross-section	4-21
Figure 4.3-1. Back River Project Conceptual Process Arrangement	4-41
Figure 4.6-1. Conceptual Water Management - Goose Property (Construction)	4-47

Figure 4.6-2. Conceptual Water Management - Goose Property (Operations - Year 2)	4-48
Figure 4.6-3. Conceptual Water Management - Goose Property (Closure - Active).....	4-49
Figure 4.6-4. Conceptual Water Management - Goose Property (Post-closure)	4-50
Figure 4.6-5. Conceptual Water Management - George Property (Construction)	4-51
Figure 4.6-6. Conceptual Water Management - George Property (Operations)	4-52
Figure 4.6-7. Conceptual Water Management - George Property (Closure - Active)	4-53
Figure 4.6-8. Conceptual Water Management - George Property (Post-closure).....	4-54

List of Tables

TABLE	PAGE
Table 1. Project Phases	ii
Table 2.1-1. Geographic Coordinates of Back River Project Mine Sites	2-1
Table 2.1-2. SIG Tab 2 - Studies Completed for DEIS and NWB Applications	2-4
Table 4.1-1. Summary of the Infrastructure Constructed at the Goose Property.....	4-7
Table 4.1-2. Summary of the Infrastructure Constructed at the George Property	4-8
Table 4.1-3. Size of Potential Development Areas (PDA) and Footprint of Facilities	4-10
Table 4.2-1. Waste Lithology (as of February 2013)	4-15
Table 4.2-2. Waste Rock Classification - All Areas (as of October 2013)	4-16
Table 4.2-3. Size of Fuel Storage and Expected Fuel Consumption	4-23
Table 4.3-1. Summary of Goose Property Mine Operation	4-28
Table 4.3-2. Summary of George Property Mining Operation.....	4-31
Table 4.3-3. Mine Production Schedule (as of October 2013)	4-34
Table 4.3-4. Pit Design Parameters	4-35
Table 4.3-5. Life of Project.....	4-44
Table 4.3-6. Operational Beds Available by Project Phase	4-44
Table 5.1-1. SIG Tab 5 - Environmental Setting.....	5-1
Table 5.2-1. SIG Tab 5 - Environmental Setting for Fisheries	5-3
Table 5.3-1. SIG Tab 5 - Environmental Setting for Fisheries	5-3
Table 6.1-1. Water Quantities and Sources.....	6-1
Table 6.8-1. Drainage Pattern Alteration at the Goose Property	6-5

Table 6.8-2. Drainage Pattern Alterations at the George Property	6-7
Table 6.11-1. SIG Tab 6 - Predicted Environmental Effects	6-8
Table 6.11-2. SIG Tab 6 - Predicted Environmental Effects and Fisheries	6-9
Table 7.1-1. Summary of Waste Type and Amounts.....	7-1
Table 7.2-1. Proposed Treated Sewage Effluent Discharge Quality Criteria.....	7-5
Table 7.2-2. Proposed Oily Water Treatment Effluent Discharge Criteria	7-6
Table 7.2-3. Proposed Bulk Fuel Storage Pooling Water Discharge Criteria	7-6
Table 7.2-4. Proposed Surface Runoff Water Quality Criteria.....	7-7
Table 7.2-5. Proposed Landfill Seepage/Groundwater Monitoring Water Quality Criteria.....	7-10
Table 7.2-6. Proposed Landfarm Pooling Water Quality Discharge Criteria	7-11
Table 7.3-1. SIG Tab 7 - Predicted Environmental Effects.....	7-12

List of Appendices

Appendix V11-1A. SIG Concordance
Appendix V11-1B. NIRB/NPC Determination
Appendix V11-2A. General Water Licence Application
Appendix V11-3A. Proponent Information
Appendix V11-4A. Back River Project: Geochemical Characterization and ML/ARD Potential Report
Appendix V11-4B. Back River Project: Preliminary Alternatives for Waste and Water Management
Appendix V11-4C. Waste and Water Management Report for Draft Environmental Impact Statement
Appendix V11-4D. Back River Project: Goose Property Water Quality Prediction Report
Appendix V11-5A. Environmental Baseline and Assessment
Appendix V11-6A. Design Documentation and Drawings (Water Use)
Appendix V11-7A. Design Documentation and Drawings (Waste)
Appendix V11-8A. Management Plans and Reports
Appendix V11-9A. Project-specific Information Requirements (PSIR)

Volume 12. Other Approvals

Back River Project Site Preparation Summary	i
Preamble - Structure of Volume 12	vii
Table of Contents	xi
List of Figures	xviii
List of Tables	xviii
List of Appendices	xix
Acronyms and Abbreviations	xxi
1. Back River Project Site Preparation Summary	1-1
2. Location Maps and Figures	2-1
3. Proponent Information	3-1
3.1 Land Tenure	3-1
3.2 Mineral Tenure	3-1
3.3 Permits, Licences, and Authorizations	3-2
3.4 Project Overview	3-4
3.5 Current Activities and Infrastructure	3-5
3.5.1 Existing On-site Infrastructure	3-5
4. Site Preparation Activities and Components	4-1
4.1 Site Preparation of the Marine Laydown Area	4-1
4.1.1 Marine Laydown Area Development Sequence	4-2
4.1.2 Use of the Marine Laydown Area	4-2
4.1.3 Site Roads and Water Crossings	4-3
4.1.3.1 Public Access to Roads	4-3
4.1.4 Dock Construction	4-3
4.1.5 Goods and Supply Received at the Marine Laydown Area	4-3
4.1.5.1 Laydown Area and Material Storage	4-3
4.1.5.2 Construction Material, Equipment and Supplies	4-4
4.1.5.3 Consumables, Reagents and Explosives	4-4
4.1.5.4 Waste Transfer Station	4-4
4.1.5.5 Loading and Offloading Procedures	4-4
4.1.5.6 Potential Interference or Synergies with Community and Outpost Resupply (Kingaok, Cambridge Bay)	4-4
4.1.6 Fuel	4-5
4.1.6.1 Land-based Tank Farm	4-5
4.1.7 Spill Contingency and Emergency Response	4-5
4.1.8 Communication System	4-5
4.1.9 Power Generation	4-6

4.1.10	Marine Laydown Area Security	4-6
4.1.11	Water Supply	4-6
4.1.12	Sewage and Waste Water Treatment for the Marine Laydown Area	4-7
4.1.13	Waste Management for the Marine Laydown Area.....	4-7
4.1.14	Conceptual Water Management.....	4-7
4.1.15	Air Access to the Marine Laydown Area	4-7
4.2	Site Preparation of the Winter Roads.....	4-7
4.2.1	Public Use of Winter Road Corridors	4-7
4.2.2	Expected Traffic on Winter Roads.....	4-8
4.2.3	Design and Construction of the Winter Road	4-8
4.2.3.1	General Design Criteria	4-8
4.2.3.2	Design Features to Facilitate Wildlife and Human Movement	4-8
4.2.3.3	Goose Property to Marine Laydown Area	4-8
4.2.3.4	George Winter Road Spur.....	4-9
4.2.4	Spill Contingency and Emergency Response	4-9
4.2.5	Winter Roads Maintenance	4-9
4.2.6	Water Use for Winter Road Construction and Maintenance.....	4-10
4.3	Site Preparation of the Goose Property	4-10
4.3.1	Water Use during Site Preparation	4-11
4.3.1.1	Water Supply.....	4-11
4.3.1.2	Water Intake Design	4-11
4.3.1.3	Water Treatment Methods	4-11
4.3.2	Goose Exploration Camp - All-weather Road and Associated Water Crossings	4-11
4.3.2.1	Site Roads and Water Crossings	4-11
4.3.2.2	Public Access to Roads	4-12
4.3.2.3	Laydown Area and Material Storage	4-12
4.3.3	Site Water Management during Site Preparation	4-12
4.3.4	Quarries/Borrow Sources and Overburden.....	4-13
4.3.5	Diesel Fuel Supply and Storage during Site Preparation.....	4-13
4.3.6	Explosives and Ammonium Nitrate Storage during Site Preparation	4-14
4.3.7	Air Transportation.....	4-14
4.3.8	Communication Systems	4-14
4.4	Site Preparation of the George Property.....	4-14
4.4.1	Water Use during Site Preparation	4-15
4.4.1.1	Water Supply.....	4-15
4.4.1.2	Water Intake Design	4-15
4.4.1.3	Water Treatment Methods	4-15
4.4.2	Site Water Management during Site Preparation	4-15
4.4.3	Quarries/Borrow Sources and Overburden.....	4-16
4.4.4	Diesel Fuel Supply and Storage during Site Preparation.....	4-16

4.4.5	Explosives and Ammonium Nitrate Storage during Site Preparation	4-16
4.4.6	Communication Systems	4-17
5.	Environmental Assessment of Site Preparation Activities	5-1
5.1	NIRB Screening and Decisions	5-1
5.2	Potential Environmental Impacts	5-1
6.	Spills Contingency Plan	6-1
6.1	Goose Spill Contingency Plan	6-1
6.1.1	Introduction and Background	6-1
6.1.1.1	Background	6-1
6.1.1.2	Purpose	6-1
6.1.1.3	Sabina Social and Environmental Policy	6-2
6.1.1.4	Sabina Policy on Initiation for Cleanup Activities	6-3
6.1.1.5	Risk Management	6-3
6.1.1.6	Existing Facilities	6-4
6.1.1.7	Goose Camp	6-4
6.1.1.8	Temporary Camps for Resupply and Exploration	6-4
6.1.1.9	Overland Corridors	6-4
6.1.2	Materials Transport and Storage	6-5
6.1.2.1	Fuel Storage	6-5
6.1.2.2	Domestic Greywater, Sewage and Contact Water	6-5
6.1.2.3	Solid Waste	6-5
6.1.2.4	Chemicals	6-6
6.1.3	Roles and Responsibilities	6-6
6.1.3.1	All Employees (First Responders)	6-6
6.1.3.2	Emergency Response Team (Spill Cleanup Crew)	6-7
6.1.3.3	Operations Superintendent	6-7
6.1.3.4	Manager Logistics and Technical Services	6-7
6.1.3.5	Environmental Superintendent and Coordinator	6-7
6.1.3.6	Health and Safety Superintendent	6-8
6.1.3.7	VP Project Development and Director, Environment, Safety and Community Relations	6-8
6.1.4	Training and Testing	6-8
6.1.4.1	Training	6-8
6.1.4.2	Testing	6-9
6.1.5	Spill Response Equipment	6-9
6.1.5.1	General Equipment	6-9
6.1.5.2	Mobile Response Unit	6-9
6.1.6	Spill Response Procedure	6-9
6.1.6.1	Source Control	6-10
6.1.6.2	Control of Free Product	6-10
6.1.6.3	Protection	6-10

	6.1.6.4	Clean Up the Spill.....	6-10
	6.1.6.5	Report the Spill.....	6-10
	6.1.6.6	Response by Spill Location	6-11
	6.1.6.7	Response by Material Spilled.....	6-12
	6.1.6.8	Domestic Sewage, Solid Waste, and Contact Water	6-13
	6.1.6.9	Chemical.....	6-13
	6.1.6.10	Response to a Fire	6-13
	6.1.6.11	Disposal	6-13
6.1.7		Spill Potential Analysis	6-14
	6.1.7.1	Camps	6-14
	6.1.7.2	Overland Transport	6-15
	6.1.7.3	Fire Prevention	6-16
6.1.8		Reporting Procedures	6-16
6.2		George Spill Contingency Plan	6-17
6.2.1		Introduction and Background.....	6-17
	6.2.1.1	Background.....	6-17
	6.2.1.2	Purpose	6-17
	6.2.1.3	Sabina Environmental Policy	6-18
	6.2.1.4	Sabina Policy on Initiation for Cleanup Activities	6-19
	6.2.1.5	Risk Management	6-19
	6.2.1.6	Existing Facilities	6-20
6.2.2		Materials Transport and Storage.....	6-21
	6.2.2.1	Fuel Storage	6-21
	6.2.2.2	Domestic Greywater, Sewage and Contact Water	6-21
	6.2.2.3	Solid Waste.....	6-21
	6.2.2.4	Chemicals	6-22
6.2.3		Roles and Responsibilities.....	6-22
	6.2.3.1	All Employees (First Responders)	6-22
	6.2.3.2	Emergency Response Team (Spill Cleanup Crew)	6-22
	6.2.3.3	Operations Superintendent.....	6-23
	6.2.3.4	Manager Logistics and Technical Services	6-23
	6.2.3.5	Environmental Superintendent and Coordinator	6-23
	6.2.3.6	Health and Safety Superintendent.....	6-24
	6.2.3.7	VP Project Development and Director, Environment, Safety, and Community Relations	6-24
6.2.4		Training and Testing	6-24
	6.2.4.1	Training	6-24
	6.2.4.2	Testing	6-25
6.2.5		Spill Response Equipment.....	6-25
	6.2.5.1	General Equipment	6-25
	6.2.5.2	Mobile Response Unit.....	6-25

6.2.6	Spill Response Procedure	6-25
6.2.6.1	Source Control.....	6-26
6.2.6.2	Control of Free Product.....	6-26
6.2.6.3	Protection	6-26
6.2.6.4	Clean Up the Spill.....	6-26
6.2.6.5	Report the Spill.....	6-26
6.2.6.6	Response by Spill Location	6-27
6.2.6.7	Response by Material Spilled.....	6-28
6.2.6.8	Response to a Fire	6-29
6.2.6.9	Disposal	6-29
6.2.7	Spill Potential Analysis	6-30
6.2.7.1	Camps.....	6-30
6.2.7.2	Overland Transport	6-31
6.2.7.3	Fire Prevention	6-31
6.2.8	Reporting Procedures	6-31
6.3	Marine Laydown Area Spill Contingency Plan.....	6-32
7.	Closure Plan	7-1
7.1	Goose Property Closure (September 2012)	7-1
7.1.1	Introduction	7-1
7.1.1.1	General	7-1
7.1.1.2	Sabina Social and Environmental Policy	7-1
7.1.1.3	Legal Requirement.....	7-2
7.1.1.4	Site Location and Description.....	7-2
7.1.1.5	Scope of Reporting.....	7-2
7.1.2	Responsibilities for the Plan.....	7-3
7.1.3	Schedule for Abandonment and Restoration	7-3
7.1.3.1	Progressive Reclamation.....	7-4
7.1.4	Winter Restoration Plan	7-4
7.1.4.1	Buildings and Content.....	7-4
7.1.4.2	Water Supply System	7-5
7.1.4.3	Sewage System	7-5
7.1.4.4	Waste Incinerator	7-5
7.1.4.5	Electrical System.....	7-5
7.1.4.6	Camp Heating Systems	7-5
7.1.4.7	Petroleum Products and Storage Facilities	7-5
7.1.4.8	Chemicals	7-6
7.1.4.9	Spill Response Kits	7-6
7.1.4.10	Transportation.....	7-6
7.1.4.11	Drill Sites	7-6
7.1.4.12	General Camp Area	7-6
7.1.4.13	Final Documentation	7-6

7.1.5	Final Abandonment and Restoration Plan.....	7-7
7.1.5.1	Administration.....	7-7
7.1.5.2	Exploration.....	7-9
7.1.5.3	Environmental	7-10
7.1.5.4	Abandonment and Restoration Cost Estimates	7-11
7.1.6	Review of the Abandonment and Restoration Plan.....	7-11
7.2	George Property Closure (January 2013).....	7-11
7.2.1	Introduction	7-12
7.2.1.1	General	7-12
7.2.1.2	Sabina Social and Environmental Policy	7-12
7.2.1.3	Legal Requirement.....	7-13
7.2.1.4	Site Location and Description.....	7-13
7.2.1.5	Scope of Reporting.....	7-13
7.2.2	Responsibilities for the Plan.....	7-14
7.2.3	Schedule for Abandonment and Restoration	7-14
7.2.3.1	Progressive Reclamation.....	7-14
7.2.4	Winter Restoration Plan	7-15
7.2.4.1	Buildings and Content	7-15
7.2.4.2	Water Supply System	7-15
7.2.4.3	Sewage System	7-15
7.2.4.4	Waste Incinerator	7-15
7.2.4.5	Electrical System.....	7-15
7.2.4.6	Camp Heating Systems	7-16
7.2.4.7	Petroleum Products and Storage Facilities	7-16
7.2.4.8	Chemicals	7-16
7.2.4.9	Spill Response Kits	7-17
7.2.4.10	Transportation.....	7-17
7.2.4.11	Drill Sites	7-17
7.2.4.12	General Camp area	7-17
7.2.4.13	Final Documentation	7-17
7.2.5	Final Abandonment and Restoration Plan.....	7-17
7.2.5.1	Administration.....	7-17
7.2.5.2	Household Chemicals.....	7-19
7.2.5.3	Transportation.....	7-19
7.2.5.4	Exploration.....	7-20
7.2.5.5	Environmental	7-20
7.2.5.6	Land Relinquishment	7-21
7.2.6	Abandonment and Restoration Cost Estimates.....	7-21
7.2.7	Review of the Abandonment and Restoration Plan.....	7-21
7.3	Marine Laydown Area Closure	7-22
7.3.1	Seasonal Closure.....	7-22

7.3.2	Final Closure and Reclamation Plan.....	7-23
8.	Transportation Plan	8-1
8.1	Introduction	8-1
8.1.1	Existing Facilities.....	8-1
8.1.1.1	Goose Camp.....	8-1
8.1.1.2	George Camp	8-2
8.1.1.3	Temporary Camps for Resupply and Exploration	8-3
8.1.2	Proposed Facilities (2013)	8-3
8.1.2.1	Goose Camp.....	8-3
8.1.3	Scope	8-4
8.2	Airstrip and Road Construction and Operation	8-4
8.2.1	Winter Road and Ice Airstrip Infrastructure	8-4
8.2.2	All-weather Road and Airstrip Infrastructure.....	8-5
8.2.3	Rock Quarries	8-5
8.2.4	Watercrossings	8-6
8.3	Inspection and Maintenance	8-7
8.3.1	Surface Inspection and Maintenance.....	8-7
8.3.2	Watercourse Crossings Inspection and Maintenance	8-8
8.3.2.1	Regular Crossing Inspection and Maintenance	8-8
8.3.2.2	Event Crossing Inspection and Maintenance	8-9
8.3.2.3	Culvert Location Inspection	8-9
8.3.3	Snow Clearing	8-9
8.3.4	Accidents and Malfunctions.....	8-9
8.3.4.1	Emergency Response	8-9
8.3.4.2	Accidents and Malfunctions	8-10
8.4	Environment Management	8-10
8.4.1	Wildlife	8-10
8.5	Monitoring Program	8-11
8.5.1	Wildlife.....	8-11
8.5.2	Water Quality	8-11
8.6	Review of the Transportation Management Plan	8-11
	References.....	R-1

List of Figures

FIGURE	PAGE
Figure 2-1. Project Development Area and Infrastructure Areas - Marine Laydown Area	2-3
Figure 2-2. Road Corridor Overview.....	2-5
Figure 2-3. Potential Water Supply for Winter Road Option	2-7

Figure 2-4. Goose - Umwelt Permit Exploratory Road Overall Site Plan.....	2-9
Figure 2-5. George Site Layout and Proposed Infrastructure	2-11
Figure 2-6. Conceptual Water Management - Marine Laydown Area (Construction, Operations, and Active Closure)	2-12
Figure 2-7. Conceptual Water Management - Marine Laydown Area (Post-closure)	2-13

List of Tables

TABLE	PAGE
Table 3.3-1. Mineral Tenure Status (as of March 31, 2013)	3-2
Table 3.3-2. Current Authorizations and Permits (as of July 31, 2013).....	3-3
Table 4.1-1. Site Preparation Activities and Components at the Marine Laydown Area.....	4-1
Table 4.1-2. Proposed Treated Sewage Effluent Discharge Quality Criteria for the Marine Laydown Area	4-7
Table 4.2-1. Expected Annual Vehicle Traffic on Winter Roads during Site Preparation Activities	4-8
Table 4.3-1. Proposed Surface Runoff Water Quality Criteria.....	4-13
Table 5.1-1. Identification of Potential Environmental Impacts from Exploration Activities and Back River Project Site Preparation.....	5-3
Table 6.1-1. Summary of Potential Incidents and Preventative Measures along Transportation Corridors	6-15
Table 8.1-1. Airstrip and Connecting Road Development	8-3

List of Appendices

Appendix V12-1A. Type A Water Licence Correspondence and Application for Marine Laydown Area and Winter Roads
Appendix V12-1B. KIA Surface Access Correspondence and Applications for IOL
Appendix V12-1C. AANDC Surface Access Correspondence and Applications for Crown Land
Appendix V12-1D. DFO Correspondence and Applications
Appendix V12-1E. Transport Canada Correspondence and Applications
Appendix V12-2A. NWB Renewal and Amendment for 2BEG001015
Appendix V12-2B. NWB Renewal and Amendment for 2BEG001015
Appendix V12-2C. NWB New Type B Application for Marine Laydown Area and Winter Road
Appendix V12-2D. AANDC Amendment to N2010F0029

Appendix V12-2E. KIA Amendment to KTL304C017

Appendix V12-2F. KIA Amendment to KTP11Q001

Appendix V12-2G. KIA Amendment to KTL304C018

Appendix V12-2H. KIA Amendment to KTL304F049

Appendix V12-2I. KIA New Quarry Application for Goose Property

Appendix V12-2J. KIA New Quarry Application for Marine Laydown Area

Appendix V12-3A. NIRB Screening Decisions