



APPENDIX A TABLE OF CONCORDANCE

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
2.2 Public Participation			
1		The proponent is required to provide current information about the project to the public and especially to the communities likely to be most affected by the project.	Section 8.0
2.3 Aboriginal Consultation			
2		The proponent will ensure that it engages with Aboriginal people and groups that may be affected by the project, or that have potential or established Aboriginal and Treaty rights and related interests in the project area, as early as possible in the project planning process. The proponent is strongly encouraged to work with Aboriginal groups in establishing an engagement approach. In addition, the Aboriginal persons involved will have access to relevant information that allows them to understand the proposed project and to determine its impacts on their rights and interests. The proponent will make reasonable efforts to integrate “traditional Aboriginal knowledge” that will contribute to the assessment of environmental impacts.	Section 8.0, Appendices DD and EE
3.2 Study Strategy and Methodology			
3		It is possible that the EIS Guidelines may include matters that, in the judgement of the proponent, are not relevant or significant to the project. If such matters are omitted from the EIS, the proponent will clearly indicate it and the justification for their conclusion provided so that the Agency, federal authorities, Aboriginal groups, the public and any other interested party have an opportunity to comment on this decision.	Paleontology - 1.2.4 and 5.4.1; Changes to Environment on Federal or Transboundary Lands - 6.2.3.2; Ammonia - Appendix J, Ammonia Emissions Memo
4		In describing methods, the proponent will document how it used scientific, engineering, traditional and local knowledge to reach its conclusions. Assumptions will be clearly identified and justified. All data, models and studies will be documented such that the analyses are transparent and reproducible. All data collection methods will be specified. The uncertainty, reliability and sensitivity of models used to reach conclusions must be indicated	Section 6.0 and Appendices
5		All significant gaps in knowledge and understanding related to key conclusions presented in the EIS must be identified. The steps to be taken by the proponent to address these gaps will also be identified. Where the conclusions drawn from scientific and technical knowledge are inconsistent with the conclusions drawn from traditional knowledge, the EIS will contain a balanced presentation of the issues and a statement of the proponent's conclusions.	Section 6.0 and Appendix DD

	Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
		3.3 Integration of EA, Aboriginal and Public Consultation Information	
6		The proponent will ensure that public and Aboriginal concerns are well documented in the EIS. The proponent will identify and explain all unresolved questions or concerns as part of its analysis of the impacts of the project.	Sections 6.0 and 8.0, Appendices V, DD, and EE
		3.4.2 Community Knowledge and Aboriginal Traditional Knowledge	
7		The proponent will incorporate into the EIS the community and Aboriginal traditional knowledge to which it has access or that is acquired through Aboriginal engagement activities, in keeping with appropriate ethical standards and without breaking obligations of confidentiality, if any. Agreement should be obtained from Aboriginal groups regarding the use, management and protection of their existing traditional knowledge information during and after the EA.	Sections 5.11.3 and 6.4.2.5, Appendices DD and EE
		3.4.3 Existing Information	
8		The proponent will either include the information directly in the EIS or clearly direct the reader to where it may obtain the information (i.e., through cross-referencing). When relying on existing information, the proponent will also comment on how the data have been applied to the project, clearly separate factual lines of evidence from inference, and state any limitations on the inferences or conclusions that can be drawn from the existing information.	All documents
		3.5 Presentation and Organization of the EIS	
10		The title page of the EIS and its related documents will contain the following information: — project name and location; — title of the document, including the term “environmental impact statement”; — subtitle of the document; — name of the proponent; and — the date.	Title page
11		A glossary defining technical words, acronyms and abbreviations shall be included.	Glossary and Abbreviations
12		The cumulative effects assessment, which should be provided in a stand-alone section	Section 7.0

	Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
		<p>Detailed studies (including all relevant and supporting data and methodologies) shall be provided in separate appendices</p>	<p>Appendices as follows: A Table of Concordance B Optimization Study C Mining Study D Tailings Storage Facility E Traffic Study F Water Management Plan G Environmental Baseline Study H Acoustic Environment I Light Environment J Air Quality K Geochemistry L Geochemical Modeling M Hydrogeology N Surface Hydrology O Hydrologic Modeling P Aquatics Q Fisheries and Habitat R Terrestrial S Wetlands T Socio-economic U Heritage Resources V Public Engagement W Human Health and Environment Screening Level Risk Assessment X Alternatives Assessment Table Y EIS Guidelines Z Occupational Health and Safety Policy, Corporate Governance Policy, Environmental Policy AA Claims List BB PEA CC Economic Factors DD Aboriginal Consultation Report EE Country Foods Assessment FF Photo Record of the Goliath Gold Project GG TSF Failure Modeling HH Failure Modes and Effects Analysis II Draft Fisheries Compensation Strategy and Plans</p>

Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section Required Content	
	The EIS shall explain how information is organized in the document.	Section 1.7
	A Table of Concordance, which cross references the information presented in the EIS with the information requirements identified in the EIS Guidelines	Appendix A
	4 SUMMARY OF ENVIRONMENTAL IMPACT STATEMENT	
13	The proponent will prepare a summary of the EIS in both of Canada's official languages (French and English) to be provided to the Agency at the same time as the EIS	Executive Summary
14	The summary is to be provided as a separate document and should follow the outline provided below: 1.Introduction and environmental assessment context 2.Project overview 3.Scope of project and assessment 4.Alternative means of carrying out the project 5.Public and Aboriginal engagement 6.Summary of environmental effects assessment 7.Mitigation measures 8.Proposed significance determination	Executive Summary
15	The summary will have a sufficient level of detail for the reader to learn and understand the entire project, potential impacts, mitigation measures proposed by the proponent, the residual effects and the conclusions regarding significance.	Executive Summary
	5 INTRODUCTION AND PROJECT OVERVIEW	
	5.1 Geographical Setting	
17	The EIS should contain a concise description of the geographical setting in which the project will take place. The following information will be included:	Section 1.0
	- environmentally sensitive areas, such as national, provincial and regional parks, ecological reserves, wetlands, estuaries, and habitats of provincial or federally listed species at risk and other sensitive areas;	Sections 1.2, 5.9 and 5.10
	- current land use in the area and the relationship of the project facilities and components with any federal lands;	Section 1.2.4
	- local and Aboriginal communities;	Section 1.6.1
	- traditional Aboriginal territories, treaty lands, Indian reserve lands;	Section 1.2.1
	- the UTM coordinates of the main project site; and,	Section 1.2.1
	- the environmental significance and value of the geographical setting in which the project will take place and the surrounding area.	Section 1.2.4
18	The location map should include the boundaries of the proposed site including UTM coordinates, the major existing infrastructure, adjacent land uses and any important environmental features.	Sections 1.0, 2.0, and 13.0
19	Site plans/sketches and photographs showing project location, site features and the intended location of project components should be included.	Section 3.0 and Appendix FF

Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Required Content	
	5.2 Regulatory Framework and the Role of Government	
20	This section should identify, for each jurisdiction, the government bodies involved in the EA as well as the EA processes. More specifically identify:	
	- any federal power duty or function to be exercised that may permit the carrying out (in whole or in part) of the project or associated activities;	Sections 1.5, 6.2.3, and 6.4.3
	- the environmental and other specific regulatory approvals and legislation that are applicable to the project at the federal, provincial, regional and municipal levels;	Section 1.5
	- government policies, resource management, planning or study initiatives pertinent to the project and/or EA and discuss their implications;	Section 1.5
	- policies and guidelines of the Aboriginal groups being consulted that are pertinent to the project and/or EA and discuss their implications;	Appendix DD
	- any treaty or self government agreements with Aboriginal groups that are pertinent to the project and/or EA;	Appendix DD
	- any relevant Land Use Plans, Land Zoning, or Community Plans;	Section 1.5
	- major components of the project and identify those being applied for and constructed within the duration of approvals under provincial and federal legislation; and,	Sections 1.4 and 3.0
	- in a summary form the regional, provincial and/or national objectives, standards or guidelines that have been used by the proponent to assist in the evaluation of any predicted environmental effects.	Section 6.0 and Appendices
	5.3 Participants in the Environmental Assessment	
21	Clearly identify the main participants in the EA including jurisdictions other than the federal government, Aboriginal groups, community groups, and environmental organizations.	Section 1.6
	5.4 The proponent	
22	The proponent shall:	
	- provide contact information (e.g. name, address, phone, fax, email)	Section 1.1
	- identify itself and the name of the legal entity that would develop, manage and operate the project;	Section 1.1
	- explain corporate and management structures, as well as insurance and liability management related to the project;	Sections 1.1.1 and 1.1.2
	- specify the mechanism used to ensure that corporate policies will be implemented and respected for the project;	Section 1.1.1
	- summarize key elements of its environment, health and safety management system and discuss how the system will be integrated into the project; and,	Sections 1.1.3 and 1.1.4
	- identify key personnel, contractors, and/or sub-contractors responsible for preparing the EIS.	Acknowledgments
	5.5 Purpose of the Project	
23	The proponent will provide the rationale for the project, explaining the background, the problems or opportunities that project is intended to satisfy and the stated objectives.	Section 1.3

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
5.6 Project Components			
24		The proponent will describe the project, by presenting the project components, associated and ancillary works, activities, scheduling details, the timing of each phase of the project and other characteristics that will assist in understanding the environmental effects. This includes a characterization of geotechnical properties of the components such as:	Section 3.0
		- The geology, based on results from drilling, test pits and sampling programs;	Section 5.4
		- Tailings management facility (foundation conditions, hazard classification, location, preliminary designs, tailings properties, tailings water seepage);	Section 3.7, Appendix D and GG
		- Waste rock and overburden storage and stock piles (locations, volumes and development plans; geotechnical conditions, seismicity and design criteria, description of waste water management components of the project);	Section 3.5 and Appendix C
		- Open pit and underground mine (development plans including pit phases, phase designs, pit design including slopes, design standards, geotechnical and hydrogeological considerations (e.g. pit wall management));	Sections 3.3 and 3.4, Appendix B and C
		- Water management (pit water and/or underground mine water); and	Section 3.8, Appendix F and L
		- Permanent and temporary access infrastructure, as well as the pipeline, identifying the route of each access road, the location and types of structure used for stream crossings.	Sections 3.1 and 3.11
5.7 Project Activities			
26		The EIS will include expanded descriptions of the construction, operation, maintenance, foreseeable modifications, and where relevant, closure, decommissioning and restoration of sites and facilities associated with the proposed project.	Section 3.2
27		The EIS will include a detailed schedule including time of year, frequency, and duration for all project activities.	Section 3.2
28		The EIS will provide the preliminary outline of a decommissioning and reclamation plan for any components associated with the project.	Section 11.0
		- This shall include ownership, transfer and control of the different project components as well as the responsibility for monitoring and maintaining the integrity of some of the structures.	Section 11.0
29		- A conceptual discussion on how decommissioning could occur shall be provided for permanent facilities.	Section 11.0
6 SCOPE OF PROJECT			
30		The scope of project for the purposes of the EA includes the components (section 5.6), physical activities (section 5.7) and federal decisions (section 5.2). The proponent will consider all the components, activities and decisions identified in these sections as part of the effects assessment.	Sections 1.5, 3.0, and 6.0

Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section Required Content	
	7 SCOPE OF ASSESSMENT	
	7.1 Factors to be Considered	
	7.1.1 Valued Components	
31	The proponent will identify the VCs deemed appropriate to ensure the full consideration of the factors listed in subsection 19(1) of CEAA, 2012 as well as the 2012 amendment to section 79 of the Species at Risk Act.	Section 6.3
32	The proponent will describe how other VCs were selected and what methods were used to predict and assess the adverse environmental effects of the project on these components.	Sections 6.1 and 6.3
	The rationale for selecting these components as VCs and for excluding others should be stated.	Section 6.1.1
33	For consultations associated with the identification of VCs, the proponent shall identify those VCs, processes, and interactions that either were identified to be of concern during any workshops or meetings held by the proponent or that the proponent considers likely to be affected by the project. In doing so, the proponent should indicate to whom these concerns are important and the reasons why, including Aboriginal, social, economic, recreational, and aesthetic considerations.	Sections 6.0 and 8.0
	- The proponent will describe any issues raised or comments noted regarding the nature and sensitivity of the area within and surrounding the project and any planned or existing land and water use in the area.	Section 6.3
	- The proponent will also indicate the specific geographical areas or ecosystems that are of particular concern to interested parties, and their relation to the broader regional environment and economy.	Section 6.3
	7.1.2 Effects of Potential Accidents or Malfunctions	
34	The proponent will identify the probability of potential accidents and malfunctions related to the project, including an explanation of how those events were identified, potential consequences (including the environmental effects), the plausible worst case scenarios and the effects of these scenarios.	Section 4.0 and Appendix HH
	- This will include an identification of the magnitude of an accident and/or malfunction, including the quantity, mechanism, rate, form and characteristics of the contaminants and other materials likely to be released into the environment during the accident and malfunction events.	Section 4.0 and Appendix GG
35	- The EIS will also describe the safeguards that have been established to protect against such occurrences and the contingency/emergency response procedures in place if accidents and/or malfunctions do occur. Detailed contingency and response plans should be presented.	Sections 3.0, 9.0, and 12.0

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
	7.1.3	<u>Effects of the Environment on the Project</u>	
36		The EIS will take into account how local conditions and natural hazards, such as severe and/or extreme weather conditions and external events (e.g. flooding, ice jams, landslides, avalanches, fire, outflow conditions and seismic events) could adversely affect the project and how this in turn could result in impacts to the environment (e.g., extreme environmental conditions result in malfunctions and accidental events).	Section 4.0
		- These events should be considered in different probability patterns (i.e. 5-year flood vs. 100-year flood).	Section 4.0
		Longer-term effects of climate change will also be discussed up to the projected post-closure phase of the project. This discussion should include a description of climate data used.	Section 4.0
		The EIS will provide details of a number of planning, design and construction strategies intended to minimize the potential environmental effects of the environment on the project.	Section 4.0
		7.2 Scope of the factors	
	7.2.1	<u>Spatial Boundaries</u>	
37		The EIS will clearly indicate the spatial boundaries to be used in assessing the potential adverse environmental effects of the proposed project and provide a rationale for each boundary. It is recognized that the spatial boundaries for each VC may not be the same.	Sections 6.1 and 7.1
	7.2.2	<u>Temporal boundaries</u>	
38		The temporal boundaries of the EA should span all phases of the project: construction, operation, maintenance, foreseeable modifications, and where relevant, closure, decommissioning and restoration of the sites affected by the project.	Section 6.1
		Temporal boundaries shall also consider seasonal and annual variations related to VCs for all phases of the project, where appropriate. Community and Aboriginal traditional knowledge should factor into decisions around appropriate temporal boundaries.	Section 6.1
		8 ALTERNATIVE MEANS OF CARRYING OUT THE PROJECT	
39		The EIS will identify and consider the effects of alternative means of carrying out the project that are technically and economically feasible. The proponent will complete the following procedural steps for addressing alternative means:	Section 2.0 and Appendix X
40		<i>Identify the alternative means to carry out the project.</i>	
		- Develop criteria to determine the technical and economic feasibility of the alternative means; and,	Section 2.0
		- Identify those alternative means that are technically and economically feasible, describing each alternative means in sufficient detail.	Section 2.0
		<i>Identify the effects of each alternative means.</i>	
		- Identify those elements of each alternative means that could produce effects in sufficient detail to allow a comparison with the effects of the project; and	Section 2.0 and Appendix X
		- The effects referred to above include both environmental effects and potential adverse impacts on potential or established Aboriginal and Treaty rights and related interests.	Section 2.0 and Appendix X

Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section Required Content	
	<i>Identify the preferred means.</i>	
	- Identify the preferred means based on the relative consideration of effects; and of technical and economic feasibility; and	Section 2.0 and Appendix X
	- Determine criteria to examine the effects of each remaining alternative means to identify the preferred means.	Section 2.0 and Appendix X
	In its alternative means analysis, the proponent will address, as a minimum, the following components:	
	- Ore production technologies: open-pit or underground extraction method; ore processing methods; waste rock and tailings disposal; contaminated water treatment; ore transportation, etc.	Section 2.3, Appendix B, C, and F
	- Energy sources for the mine complex operations;	Appendix X
	- Location of infrastructure related to the mine and the operation of the mine, including the location of the final effluent discharge point;	Section 2.3 and Appendix F
	- Transportation routes for mine materials including any goods needed to operate the mine;	Section 2.3
	- Ore stockpiles;	Section 2.3
	- Primary crusher, grinding mills, and processing plant;	Section 2.3
	- tailings storage facility;	Section 2.3, Appendix D and GG
	- overburden and biomass storage areas;	Section 2.3
	- explosives manufacturing and storage facilities;	Section 2.3
	- associated buildings, facilities and infrastructure: equipment maintenance shop, warehouse and laydown facilities, fuel farm, administrative offices, access roads; and	Section 2.3
	- related piping and power infrastructure as appropriate (i.e. under the proponent's control).	Section 2.3
41	8.1 Assessment of Alternatives for Mine Waste Disposal	
	Should an MMER Schedule 2 amendment be required for the project, the proponent is strongly encouraged to include MMER requirements for an assessment of alternatives for mine waste disposal in the EIS. The proponent needs to undertake a robust and thorough assessment of mine waste disposal alternatives, which applies methodology that is provided in Environment Canada's Guidelines for the Assessment of Alternatives for Mine Waste Disposal (2011).	Section 2.3.6 and Appendix D
	9 BASELINE CONDITIONS	
	9.1 Existing Environment	
	9.1.1 <u>Methodology</u>	
42	The EIS will include a description of the environment, including the components of the existing environment and environmental processes, their interrelations and interactions as well as the variability in these components, processes and interactions over time scales appropriate to the EIS.	Section 5.0

Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section Required Content	
43	The proponent will take an ecosystem approach that considers both scientific and traditional knowledge and perspectives regarding ecosystem health and integrity. The proponent will identify and justify the indicators and measures of ecosystem health and integrity used for analysis and relate these to the identified VCs and proposed monitoring and follow-up measures.	Sections 5.0 and 6.0, Appendix W
	The proponent will identify and justify the indicators and measures of ecosystem health and integrity used for analysis and relate these to the identified VCs and proposed monitoring and follow-up measures.	Sections 5.0 and 6.0, Appendix W
44	For the biophysical environment, the proponent will consider the resilience of relevant species populations, communities and their habitats. The proponent will summarize all pertinent historical information on the size and geographic extent of relevant animal populations as well as density.	Section 5.0, Appendix G and R
45	Habitat at regional and local scales should be defined in ecological mapping of aquatic and terrestrial vegetation types and species.	Section 5.0, Appendix G and R
46	The proponent will address issues such as habitat, nutrient and chemical cycles, food chains, productivity. Range and probability of natural variation over time will also be considered. The proponent will also examine changes in the distribution, populations, behaviour, and availability of wildlife, fish, and flora in the important context of implications to current use of lands and resources by Aboriginal peoples.	Sections 5.0 and 6.0, Appendix W, Appendix G, Q and R
	9.1.2 <u>Biophysical Environment</u>	
47	<i>Atmospheric Environment and Climate</i>	
	- Ambient air quality in the project area and, for the mine site, the results of a baseline survey of ambient air quality, focusing on the contaminants, Total Suspended Particulates, PM2.5, PM10 SOx and NOx;	Section 5.2 and Appendix J
	- Current ambient noise levels in the project study area, including the results of a baseline ambient noise survey. Information on typical sound sources, geographic extent and temporal variations will be included; and	Section 5.3 and Appendix H
	- Existing ambient light levels at the project site and at any other areas where project activities could have an effect on light levels. The EIS should describe night-time illumination levels during different weather conditions and seasons.	Section 5.3 and Appendix I
	- Historical records of total precipitation (rain and snow), mean, max and min temperatures	Section 5.1 and Appendix G
48	<i>Terrestrial Environment-Geology and Geochemistry</i>	
	- A discussion of the soils, surficial sediments, bedrock and host rock geology of the deposit which includes geological maps of appropriate scale and cross-sections. Where appropriate, the following geologic parameters will be included:	
	- Representative lithologic descriptions including: age, colour, grain size, porosity, permeability, mineralogy, physical strength, hardness, weathering characteristics, depositional setting and correlations of bedrock units;	Sections 5.4 and 5.5, Appendix AA and C
	- Spatial distribution and thickness of lithologic units;	Sections 5.4 and 5.5, Appendix AA and C

Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section Required Content	
	- Alteration styles, mineralogy, bulk chemistry, occurrence and intensity of bedrock units;	Section 5.4 , Appendix AA and C
	- Structural fabric (e.g., fractures, faults, foliation and lineation) and structural relationships;	Section 5.4 , Appendix AA and C
	- Ore mineralogy, including sulphide types, abundance, mode of occurrence, extent of previous oxidation and an estimate of relative sulphide reactivity;	Section 5.4 , Appendix AA and C
	- Type and grade of metamorphism; and	Section 5.4 , Appendix AA and C
	- Regional geologic framework including tectonic belt, terrain, regional metamorphism and structure.	Section 5.4 , Appendix AA and C
	- A delineation of the regional and local geological structures in the project area that may affect the proposed infrastructure. This includes major structural features as well as lesser local structures, their ecological functions and distribution in the local study area.	Sections 5.4 and 5.5, Appendix AA and C
	- Geomorphology and topography at areas proposed for construction of major project components,	Sections 5.4 and 5.5, Appendix AA and C
	- Bedrock lithology, morphology, geomorphology and soils where earthworks are proposed;	Sections 5.4 and 5.5, Appendix AA and C
	- A discussion of geological hazards that exist in the project area:	Section 5.4.1
	- History of seismic activity in the area;	Section 5.4.1
	- Isostatic rise or subsidence; and	Section 5.4.1
	- Landslides (including rockslides).	Section 5.4.1
	- Suitability of topsoil and overburden for use in the re-vegetation of surface-disturbed areas;	Sections 5.4, 5.5, and 11.0
	- Sites of paleontological or palaeobotanical significance.	Section 5.4.1
	- A characterization of the geochemical composition of expected mine materials such as waste rock, ore, low grade ore, tailings, overburden and potential construction material, which should include:	Section 5.4.3, Appendix K and L
	- Mineralogy;	Section 5.4.3, Appendix K and L
	- Elemental composition of lithologies in study area (major and trace elements);	Section 5.4.3, Appendix K and L
	- Potential for acid generation, neutralization and contaminated neutral drainage	Section 5.4.3, Appendix K and L
49	Acid Rock Drainage/Metal Leaching	
	The ARD/ML prediction information shall be used to predict water quality for effects assessment and to determine mitigation requirements for the Project. Additional information shall be provided on the following:	
	- the type and method used for the ARD/ML prediction and possible mitigation measures;	Section 5.4.3, Appendix K and L
	- waste rock, tailings and low grade ore characterization, volumes, segregation/disposal method mitigation/management plans, contingency plans, operational and post-closure monitoring and maintenance plans;	Section 5.4.3, Appendix K and L

Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section Required Content	
	- assessment of short term metal leaching properties;	Section 5.4.3, Appendix K and L
	- longer term kinetic testing to evaluate rates of acid generation (if any) and metal leaching;	Section 5.4.3, Appendix K and L
	- assessment of the feasibility to successfully segregate potentially-acid generating (PAG) and non-acid generating (NAG) waste materials during operations, proposed geochemical segregation criteria and identification of operational methods that will be required to achieve geochemical characterization during operations (i.e. geochemical surrogates, on site lab, procedures needed, etc.);	Section 5.4.3, Appendix K and L
	- sensitivity analysis to assess the effects of imperfect segregation of waste rock;	Section 5.4.3, Appendix K and L
	- estimates of the potential for mined materials (including waste rock, tailings and low grade ore) to be sources of ARD or ML; estimates of potential time to the onset of ARD or ML; and the ability to prevent or control ARD and ML during operation and post-closure;	Section 5.4.3, Appendix K and L
	- pit water chemistry during operation and post-closure, and pit closure management measures (e.g. flooding). This shall include geochemical modeling of pit water quality in the post-closure period;	Section 5.4.3, Appendix K and L
	- surface and seepage water quality from the waste rock dumps, tailings/waste rock impoundment facility, stockpiles and other infrastructure during operation and post-closure; and	Section 5.4.3, Appendix K and L
	- ARD/ML prevention/management strategies under a temporary or early closure scenario, including low grade ore.	Section 5.4.3, Appendix K and L
	- quantity and quality of leachate from samples of tailings, waste rock, and ore,	Section 5.4.3, Appendix K and L
	- quantity and quality of effluent to be released from the site into the receiving waters, and	Section 5.4.3, Appendix K and L
	- quality of humidity cell or column test liquid from acid rock testing;	Section 5.4.3, Appendix K and L
50	<i>Surficial Geology (i.e. Terrain and Soil)</i>	
	- Baseline mapping and description of landforms and landform processes and soils within the local and regional project area,	Section 5.5 and Appendix G
	- Maps depicting soil depth by horizon and soil order within the mine site area to support soil salvage and reclamation efforts, and to outline potential for soil erosion;	Section 5.5 and Appendix G
	- Sedimentological and geochemical characteristics of surficial sedimentary units and soils;	Section 5.5 and Appendix G
	- A description/details of soil sample analysis completed and the quality assurance/quality control program followed; and	Section 5.5 and Appendix G
	- A summary of the baseline data on the concentration of trace elements in site soils prior to project development.	Section 5.5 and Appendix G
51	<i>Water Resources</i>	
	- The hydrogeologic conditions at the site. It will examine all available existing hydrogeology information required to assess the effects of the project.	Section 5.6, Appendix M

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
		– An appropriate hydrogeologic model shall be presented for the project area, which discusses the hydrostratigraphy and groundwater flow systems. Include the rationale for the selected model;	Section 5.6, Appendix M
		– A detailed conceptual model will be provided. Model input parameters and boundary conditions will be clearly defined. Model inputs will be based on a sufficiently large data set and be conservative in nature. The model will be calibrated against baseline conditions and should be tested using site groundwater monitoring data to confirm the generated model; and	Section 5.6, Appendix M
		– A sensitivity analysis will be performed to test model sensitivity to climatic variations (e.g., recharge) and hydrogeologic parameters (e.g., hydraulic conductivity).	Section 5.6, Appendix M
		– A description of the hydrogeology at the site and at local and regional study areas. The description shall:	Section 5.6, Appendix M
		– Characterize the physical and geochemical properties of hydrogeological units (e.g., aquifers and aquitards etc.);	Section 5.6, Appendix M
		– Delineate regional and local groundwater flow patterns and rates;	Section 5.6, Appendix M
		– Identify recharge and discharge areas;	Section 5.6, Appendix M
		– Identify groundwater interaction with surface waters; and,	Section 5.6, Appendix M
		– Describe baseline groundwater quality;	Section 5.6, Appendix M
		– Describe groundwater sources used as drinking water in the study area, their current use and potential for future use	Section 5.6, Appendix M
		– Maps showing groundwater divides and areas of recharge and discharge, with project components overlain;	Section 5.6, Appendix M
		– Hydrogeologic maps and cross-sections for the mine area to outline the extent of aquifers and aquitards, including bedrock fracture and fault zones, locations of wells, springs, surface waters, and project facilities. Groundwater levels, potentiometric contours and flow directions should be included;	Section 5.6, Appendix M
		– An inventory and analysis of existing information on the hydrogeological conditions/groundwater resources in the project area, including published reports, geological maps well record data and Quality Assurance/Quality Control (QA/QC) procedures followed;	Section 5.6, Appendix M
		– A review of the physical geography and the geology of the area as it pertains to local and regional groundwater flow systems and aquifer/aquitard systems;	Section 5.6, Appendix M
		– Location and description of all groundwater monitoring wells with respect to project facilities, including diameter and screen depth and intercepted aquifer unit (zone);	Section 5.6, Appendix M
		– A description of baseline groundwater level data for regional and local flows in all aquifer units (overburden and bedrock units);	Section 5.6, Appendix M
		– A description of monitoring protocol for collection of existing groundwater data;	Section 5.6, Appendix M
		– Measurements of hydraulic conductivity for all hydrogeological units in the project area;	Section 5.6, Appendix M

Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section Required Content	
	– Modeling of baseline hydrogeological conditions (refer to hydrogeological modeling section);	Section 5.6, Appendix M
	– Seasonal variations in groundwater levels, flow regime, and quality;	Section 5.6, Appendix M
	– Groundwater interactions with surface water, including discharge to surface water and baseflow calculations;	Section 5.6, Appendix M
	– A description of local and regional potable groundwater supplies, including their current use and potential for future use, as appropriate; and	Section 5.6, Appendix M
	– Baseline analysis of groundwater quality at the site and within the regional and local study area, including methods of sampling and analysis and details of QA/QC. This includes determining natural groundwater types and measuring concentrations of major constituents as well as minor and trace components. Ensure that particular attention is given to components that would be, from an environmental point of view, potentially of interest in the course of mining operations. This analysis should be performed on surficial and bedrock aquifers.	Section 5.6, Appendix M
	– Bedrock fracture sizes and orientations in relation to groundwater flow;	Section 5.6, Appendix M
	– Evaluation of discharge rates;	Section 5.6, Appendix M
52	The EIS should describe surface water quality, hydrology and sediment quality within the area of influence of the project. The baseline should provide the basis for the assessment of potential effects to surface water, presenting the range of water and sediment quality and surface water hydrology. Furthermore, the EIS will describe:	Sections 5.7 and 5.8
	– The delineation of drainage basins, at appropriate scales;	Section 5.7, Appendix N and O
	– The assessment of hydrological regimes,	Section 5.7, Appendix N and O
	– Flows or design peak flows for selected periods for the project area;	Section 5.7, Appendix N and O
	– Interactions between surface water and groundwater flow systems under pre-development conditions and potential impacts on these interactions during the various phases of the project;	Section 5.7, Appendix N and O
	– Any local and regional potable surface water resource;	Section 5.7, Appendix N and O
	– Seasonal water quality field and lab analytical results and interpretation at several representative local stream and lake monitoring stations established at the project site.	Section 5.8, Appendix G and P
53	<i>Wetlands</i>	
	Wetlands that may be affected by project activities will be characterized according to their location, size, type (wetland class and form), species composition and ecological function (Canadian Wetland Classification System (National Wetlands Working Group [NWWG] 1997).	Section 5.9 and Appendix Q
	Efforts should focus on describing the wetlands with the greatest potential to be affected (i.e., within the project footprint).	Section 5.9 and Appendix Q
	An overview of the key plant communities and animals that rely on wetlands will be presented.	Section 5.9 and Appendix Q
	An overview of the key plant communities and animals that rely on wetlands will be presented.	Section 5.9 and Appendix Q

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
54		<i>Fish and Fish Habitat</i>	
		The EIS will describe the limnology, hydrology, freshwater biota, presence of fish and other freshwater species, associated habitats and habitat distribution and fisheries in potentially affected surface waters, based on available published information, information resulting from community consultation, and/or results of on-site baseline surveys.	Section 5.8, Appendix G, Q, and II
		– Characterize fish populations on the basis of species and life stage for affected water bodies (i.e., project footprint, upstream and downstream);	Section 5.8, Appendix G, Q, and II
		– Classify and quantify fish habitat, as per the standard methods available from the Ontario Ministry of Natural Resources such as the Aquatic Habitat Inventory Manual or Ontario Stream Assessment Protocol.	Section 5.8, Appendix G and Q
		– List any rare fish or mussel species that are known to be present.	Section 5.8, Appendix G and Q
		– Identify any potential waterbodies and fish habitat sites that could be rehabilitated for possible habitat gains to offset losses from the project.	Section 5.8.4.7 and Appendix II
		In order to allow analysis of the project’s effects, the EIS must document the physical and biological characteristics of the fish habitat likely to be directly or indirectly affected by the project.	Section 5.8, Appendix G and Q
		The EIS must illustrate, on a topographic scale map, the hydrographic network (water bodies and watercourses), including intermittent streams, flood risk areas and wetlands. It must also indicate the boundaries of the watershed and subwatersheds of the study area.	Section 5.7, Appendix G, N, O, and II
		The emphasis must be placed on the watercourses and water bodies likely to be affected by the project and their physical characteristics, water quality and hydrological regime.	Section 5.7, Appendix G, N, O, and II
		Hence, for all the watercourses and water bodies on which effects are anticipated, the EIS must describe the biophysical characteristics, including:	
		– For each watercourse, indicate the name of the watercourse and provide a description of the habitat by homogeneous section. The parameters that must be determined are length of the section, width of the channel from the high water mark (bankful width), water depths, type of substrate (sediments), aquatic and riparian vegetation, including bank slopes. It is recommended that photos be attached to the description;	Sections 5.7 and 5.8.4, Appendix G, N, and O
		– For each lake or water body affected, indicate the name of the water body and provide a description. The parameters that must be determined are total surface area, bathymetry, maximum and mean depths, water level fluctuations, type of substrate (sediments), and location of submerged, floating and emergent aquatic vegetation, and water quality parameters (e.g. water temperature, turbidity, pH, dissolved oxygen profiles);	Sections 5.7 and 5.8.4, Appendix G, N, and O
		– Monthly/seasonal/annual water flow (discharge) data, including minimum and maximum flows;	Sections 5.7 and 5.8.4, Appendix G, N, and O
		– Natural obstacles (e.g. falls, beaver dams) or existing structures (e.g. water crossings) that hinder the free passage of fish.	Sections 5.7 and 5.8.4, Appendix G, N, and O
		– Preparation of habitat maps at a suitable scale indicating the amount of habitat for spawning, nursery, feeding, migration routes etc. This information should be linked to water depths (bathymetry) to identify the extent of a lake’s littoral zone.	Sections 5.7 and 5.8.4, Appendix G, N, and O

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
		Fish sampling survey methods used must be described in order to allow experts to ensure the quality of the information provided. If studies on fish and fish habitat were carried out previously, they are to be submitted with the EIS.	Sections 5.7 and 5.8.4, Appendix G, N, and O
		For all watercourses or water bodies on which the project is likely to have effects, the EIS must:	
		– Describe the fish species present on the basis of the surveys carried out and the data available (e.g. electric and experimental fishing, government and historical databases, sport fishing data). Identify the sources of the data and provide the information concerning the fishing carried out (e.g. location of sampling stations, catch methods, date of catches, species);	Section 5.8.4, Appendix G, and Q
		– Specify the location and surface area of potential or confirmed fish habitats and describe how they are used by fish (spawning, rearing, growth, feeding, migration, overwintering)	Section 5.8.4, Appendix G and Q
		– Locate and describe suitable habitats for species at risk that appear on federal and provincial lists and that are found or are likely to be found in the study area.	Section 5.8.4, Appendix G and Q
		– Document any blasting activity near water where vibrations may affect fish behaviour, such as spawning or migrations.	Sections 3.3.4 and 6.2.1.12
		– For sites where stream crossings are to be installed, constructed or modified, determine the need to ensure free passage of fish. If the proponent believes that it is not necessary to ensure free passage of fish, it must explain why by demonstrating that there is a natural barrier to free passage of fish at or near the site of the work, or that the habitat upstream of the work is of marginal quantity and quality. The proponent can also consider the anticipated state of the stream following the mine operations to justify its conclusion.	Sections 6.2.1.12 and 6.4.1.12
55		<i>Birds, Wildlife and their Habitat</i>	
		The EIS will describe migratory and non-migratory birds (including waterfowl, raptors, shorebirds, marsh birds and other landbirds), ungulates, furbearers, amphibians, small mammals, and their habitat at the project site and within the local and regional areas. The results of any baseline surveys will be included.	Section 5.9, Appendix G and Q
		Preliminary data from existing sources should be gathered on year-round migratory bird use of the area (e.g., winter, spring migration, breeding season, fall migration). In addition to information obtained from naturalists, other relevant datasets should be consulted.	Section 5.9, Appendix G and Q
		Existing data should be supplemented by surveys, where necessary. Surveys should be designed with reference to the Canadian Wildlife Service's guidance such as Technical Report No. 508, A Framework for the Scientific Assessment of Potential Project Impacts on Birds (Hanson et al. 2010).	Section 5.9, Appendix G and Q
		Other wildlife and their habitat that could be impacted by project activities will be characterized using existing data, supplemented by surveys as appropriate (e.g. amphibians, reptiles, invertebrates). The EIS should give particular consideration to areas of concentration of migratory animals, such as breeding, denning and/or wintering areas, as well as breeding areas of species low in number and high in the food chain (e.g. furbearers such as black bear and wolf).	Section 5.9, Appendix G and Q

Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section Required Content	
	The description of the existing environment will include consideration of existing or proposed protected areas, special management areas, and conservation areas in the regional study area.	Section 5.9, Appendix G and Q
56	<i>Species at Risk and Species of Conservation Concern</i>	
	As background for the analysis of the project's effects on SARs, the EIS will:	
	– Identify all SARs that may be affected by the project, using existing data and literature as well as surveys to provide current field data, as appropriate;	Section 5.10, Appendix G, Q, R and S
	– Provide assessments of regional importance, abundance and distribution that optimize the ability to detect all species at risk and sufficient survey effort to obtain comprehensive coverage; and	Section 5.10, Appendix G, Q, R and S
	– Identify residences, seasonal movements, movement corridors, habitat requirements, key habitat areas, identified critical habitat and/or recovery habitat (where applicable) and general life history of SARs that may occur in the project area, or be affected by the project.	Section 5.10, Appendix G, Q, R and S
57	For the VC, Ecosystems (grasslands, temperate forests, etc.), the EIS will describe various ecosystems found in the project area which are likely to be affected by the project	Appendix G
58	<i>Flora</i>	
	The EIS will describe potential or known plant species in the project area, which are listed under the Species at Risk Act or other provincial or territorial endangered species legislation, and critical habitat that are likely to be affected by the project;	Sections 5.9.3 and 5.10.3
	The species selected within each biotic VC should include those of importance to health and socio-economic conditions, cultural heritage and the current use of land and resources for traditional purposes by Aboriginal persons.	Sections 5.9.3 and 5.10.3
59	9.1.3 Human environment	
	Based on the scope of project described in section 6, the following VCs should be identified and described in the relevant sections of the EIS:	
	– Land use context (e.g., hunting, fishing, outdoor recreation, use of seasonal cabins, existing land development)	Section 5.11 and Appendix T
	– Health and socio-economic conditions	Section 5.11 and Appendix T
	– Physical and cultural heritage, including structures, sites or things of historical, archaeological, paleontological or architectural significance	Section 5.11 and Appendix T
	– Current use of land and resources for traditional purposes by Aboriginal persons	Section 5.11 and Appendix T
	– In describing how the project may impede navigation, the EIS will:	
	– identify any Project components that will affect waterways and water bodies, including a description of any activities (e.g., dredging, alteration of water bed and/or water banks) that may affect waterways and water bodies;	Section 3.8.9
	– provide information on current and/or historic usage of all waterways and water bodies that will be directly affected by the project, including current Aboriginal uses, where available.	Section 5.8.1, Appendix Q, and Appendix DD
	In describing the socio-economic environment, the proponent will provide information on the functioning and health of the socio-economic environment, encompassing a broad range of matters that affect communities and Aboriginal peoples in the study area in a way that recognizes interrelationships, system functions and vulnerabilities. A description of the rural and urban settings likely to be affected by the project should be provided.	Section 5.11

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
		In describing physical and cultural heritage, the proponent will provide information on heritage resources, including structures, sites or things of historical, archaeological, paleontological or architectural significance.	Section 5.11
		In describing current uses of land and resources by Aboriginal groups for traditional purposes, the proponent should include activities related, but not limited, to hunting, fishing, trapping, cultural and other traditional uses of the land (e.g. collection of medicinal plants, use of sacred sites). Potential effects on current uses include access to areas that are of importance or concern to Aboriginal groups.	Section 5.11 and Appendix DD
60	9.2	Potential or established Aboriginal and Treaty rights and Related Interests	
		For the purposes of developing the EIS, the proponent will engage with Aboriginal groups whose potential or established Aboriginal rights and Treaty rights and related interests may be affected by the project, which include at a minimum the following groups:	Sections 8.0 and 14.0, Appendix DD
		– Wabigoon Lake Ojibway Nation;	Sections 8.0 and 14.0, Appendix DD
		– Eagle Lake First Nation;	Sections 8.0 and 14.0, Appendix DD
		– Métis nation of Ontario;	Sections 8.0 and 14.0, Appendix DD
		– Aboriginal People of Wabigoon;	Sections 8.0 and 14.0, Appendix DD
		– Wabauskang First Nation;	Sections 8.0 and 14.0, Appendix DD
		– Lac Seul First Nation	Sections 8.0 and 14.0, Appendix DD
		– Whitefish Bay (Naoakamegwanning) First Nation; and	Sections 8.0 and 14.0, Appendix DD
		– Grassy Narrows First Nation.	Sections 8.0 and 14.0, Appendix DD
		In preparing the EIS, the proponent will ensure that Aboriginal groups, especially those most likely to be affected by the project, have access to timely and relevant information that they require in respect of the project and how the project may adversely impact them.	Section 8.0, Appendix DD
		For the Aboriginal groups previously identified by the Agency, the proponent will hold meetings and facilitate these by making key EA summary documents (baseline studies, EIS and key findings) accessible and making plain language summaries of these documents.	Sections 8.0 and 14.0, Appendix DD
		At a minimum, the EIS will summarize available information on the potential or established Aboriginal and Treaty rights and related interests of the named Aboriginal groups that have the potential to be adversely impacted by the project. As part of this summary, the EIS will include for each Aboriginal group:	Sections 8.0 and 14.0, Appendix DD
		– Background information and a map of the group’s traditional territory;	Sections 1.2.4 and 8.0, Appendix DD
		– A summary engagement activities conducted prior to the submission of the EIS, including the date and means of engagement (e.g., meeting, mail, telephone);	Sections 8.0 and 14.0, Appendix DD
		– Information on each group’s potential or established rights (including geographical extent, nature, frequency, timing), including maps and data sets (e.g. fish catch numbers) when this information is provided by a group to the proponent;	Section 8.0, Appendix DD
		– An overview of key comments and concerns provided by each group to the proponent;	Sections 8.0 and 14.0, Appendix DD
		– Responses provided by government and/or the proponent, as appropriate; and	Sections 8.0 and 14.0, Appendix DD
		– Future planned engagement activities.	Section 8.0, Appendix DD

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
		10 EFFECTS ASSESSMENT	
		10.1 Environmental Effects	
61	10.1.1	<u>Methodology</u>	
		The proponent will indicate the project’s effects during construction, operation, maintenance, foreseeable modifications, and where relevant, closure, decommissioning and restoration of sites and facilities associated with the project, and describe these effects using appropriate criteria.	Section 6.0
		To the maximum extent possible, this documentation should include, for each potential project-related environmental effect, an indication of the nature of the effect, mechanism, magnitude, direction, duration, frequency and timing, geographic extent, and the degree to which it may be reversible.	Section 6.0
		The proponent will consider both the direct and indirect, reversible and irreversible, short- and long-term environmental effects of the project.	Section 6.0
		In predicting and assessing the project’s effects, the proponent will indicate important details and clearly state the elements and functions of the environment that may be affected, specifying the location, extent and duration of these effects and their overall impact.	Section 6.0
		The assessment of the effects of each of the project components and physical activities, in all phases, will be based on a comparison of the biophysical and human environments between the predicted future conditions with the project and the predicted future conditions without the project.	Section 6.0
		In undertaking the environmental effects assessment, the proponent will use best available information and methods.	Section 6.0
		All conclusions will be substantiated. Predictions will be based on clearly stated assumptions.	Section 6.4
		The proponent will describe how it has tested each assumption.	Section 6.4
		With respect to quantitative models and predictions, the proponent will discuss the assumptions that underlie the model, the quality of the data and the degree of certainty of the predictions obtained.	Section 6.0 and Appendices F, G, H, I, J, K, L, M, N, O, P, Q, R, S, W, GG, HH and II
62		<i>Risk Assessment Framework</i>	
		The proponent is expected to employ standard ecological risk assessment frameworks that categorize the levels of detail and quality of the data required for the assessment.	Section 6.0, Appendix W
63		<i>Impact Matrix</i>	
		The assessment should include the following general steps:	
		– identification of the activities and components of the project;	Section 6.3 and Appendix HH
		– predicting/evaluating the likely effects on identified valued components;	Section 6.3 and Appendix HH
		– identification of technically and economically feasible mitigation measures for any significant adverse environmental effects;	Section 6.3 and Appendix HH
		– determination of any residual environmental effects;	Sections 4.0 and 6.3 and Appendix HH
		– ranking of each residual adverse environmental effect based on various criteria; and,	Sections 4.0 and 6.3 and Appendix HH
		– determination of the potential significance of any residual environmental effect following the implementation of mitigation.	Sections 4.0 and 6.3 and Appendix HH

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
64		<i>Application of Precautionary Approach</i>	
		In documenting the analyses included in the EIS, the proponent will:	
		– Demonstrate that all aspects of the project have been examined and planned in a careful and precautionary manner in order to ensure that they would not cause serious or irreversible damage to the environment, especially with respect to environmental functions and integrity, system tolerance and resilience, and/or the human health of current or future generations;	Sections 4.0, 9.0 and 13.0 and Appendices W, GG, HH and II
		– Outline and justify the assumptions made about the effects of all aspects of the project and the approaches to minimize these effects;	Section 6.0
		– Ensure that in designing and operating the project, priority has been and would be given to strategies that avoid the creation of adverse effects;	Sections 2.0 and 6.0, Appendix X
	– Develop contingency plans that explicitly address accidents and malfunctions; and	Section 4.0	
	– Identify any proposed follow-up and monitoring activities, particularly in areas where scientific uncertainty exists in the prediction of effects.	Section 13.0	
65	10.1.2	Changes to the Environment	
		The EIS will describe any change that may be caused by the project (as scoped in section 6) the environment, which is defined as the components of the Earth, including:	Section 6.0
		– Land, water and air, including all layers of the atmosphere;	Section 6.0
		– All organic and inorganic matter and living organisms; and	Section 6.0
		– The interacting natural systems that include the components described above.	Section 6.0
		These descriptions should be integrated into the effects assessment sections of each VC included in the EIS.	Section 6.0
66		<i>Changes to components of the environment within federal jurisdiction</i>	
		The EIS will include a stand-alone section that summarizes those changes that may be caused by the project on the components of the environment listed in paragraph 5(1)(a) of CEAA, 2012, namely fish and fish habitat, aquatic species and migratory birds.	Sections 6.2.3 and 6.4.3
67		<i>Changes to the environment that would occur on federal or transboundary lands</i>	
		The EIS will include a stand-alone section that summarizes any change the project may cause to the environment that may occur on federal lands or lands outside the province in which the project is to be located (including outside of Canada).	Sections 6.2.3 and 6.4.3
68		<i>Changes to the environment that are directly linked or necessarily incidental to federal decisions</i>	
		In situations where the project requires one or more federal decisions identified in section 5.2, the EIS will also include a stand-alone section that describes any change that may be caused by the project on the environment that is directly linked or necessarily incidental to these decisions.	Sections 6.2.3 and 6.4.3

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
	10.1.3	Effects of changes to the environment	
69		<i>Effects of changes to the environment on Aboriginal peoples</i> The EIS will describe the effects of any changes the project may cause to the environment, with respect to Aboriginal peoples, on health and socio-economic conditions, physical and cultural heritage, the current use of lands and resources for traditional purposes, or any structure, site or thing that is of historical, archaeological, paleontological or architectural significance.	Section 6.4.2.5
70		<i>Effects of changes to the environment that are directly linked or necessarily incidental to federal decisions</i> In situations where the EIS has identified changes to the environment that are directly linked or necessarily incidental to federal decisions identified in section 5.2, the EIS will also include a stand-alone section that describes the effects of these changes on health and socio-economic conditions, physical and cultural heritage, or any structure, site or thing that is of historical, archaeological, paleontological or architectural significance, other than as they pertain to Aboriginal peoples (who are considered in the previous section).	Section 6.4.3.3
71	10.2	Adverse Impacts on Aboriginal and Treaty Rights and Related Interests The EIS will describe the potential adverse impacts of the project on the ability of Aboriginal peoples to exercise the potential or established Aboriginal and Treaty rights and related interests identified in section 9.2. As part of this description, this section will summarize:	Section 6.4.2, Appendix DD
		– Potential adverse impacts (on potential or established Aboriginal and Treaty rights and related interests) that were identified through the environmental effects described in sections 10.1.2 and 10.1.3	Section 6.4.2, Appendix DD
		– Specific issues and concerns raised by Aboriginal groups in relation to the potential adverse impacts of the project on potential or established Aboriginal and Treaty rights and related interests;	Section 6.4.2, Appendix DD
		– VCs suggested for inclusion in the EIS, whether or not those factors were included, and the rationale for any exclusions;	Section 6.4.2, Appendix DD
		– Where and how Aboriginal traditional knowledge or other Aboriginal views were incorporated into the consideration of environmental effects and potential adverse impacts on potential or established Aboriginal and Treaty rights and related interests; and	Section 6.4.2, Appendix DD
		– Efforts undertaken to engage with Aboriginal groups as part of collecting the information identified above.	Section 6.4.2, Appendix DD
		The assessment of the potential adverse impacts of each of the project components and physical activities, in all phases, will be based on a comparison of the exercise of the identified rights between the predicted future conditions with the project and the predicted future conditions without the project.	Section 6.4.2, Appendix DD

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
72	10.3	Public concerns	
		This section will detail public concerns raised in relation to the project, including through public consultation conducted prior to the preparation of the EIS, and/or community knowledge that may have been provided.	Section 8.0
	11	MITIGATION	
	11.1	Environmental mitigation	
73	11.1.1	Methodology	
		The EIS will describe the standard mitigation practices, policies and commitments that constitute technically and economically feasible mitigation measures and that will be applied as part of standard practice regardless of location.	Sections 6.0 and 12.0
		The proponent will then describe its environmental protection plan and its environmental management system, through which it will deliver this plan.	Section 12.0
		The plan will provide an overall perspective on how potentially adverse effects would be minimized and managed over time.	Section 12.0
		The EIS will then describe mitigation measures that are specific to each environmental effect identified in section 10.1. Measures should be written as specific commitments that clearly describe how the proponent intends to implement them. Where mitigation measures have been identified in relation to species and/or critical habitat listed under the Species at Risk Act, the mitigation measures should be consistent with any applicable recovery strategy and action plans.	Sections 6.0 and 7.0
		The EIS will describe proponent commitments, policies and arrangements directed at promoting beneficial or mitigating adverse socio-economic effects.	Sections 9.0 and 12.0, Appendix T
		The EIS will further discuss the mechanisms the proponent would use to require its contractors and sub-contractors to comply with these commitments and policies and with auditing and enforcement programs.	Section 12.0
		The EIS will specify the actions, works, minimal disturbance footprint techniques, best available technology, corrective measures or additions planned during the project's various phases (construction, operation, modification, decommissioning, abandonment or other undertaking related to the project) to eliminate or reduce the significance of adverse effects.	Sections 2.0, 6.0, 11.0, and 12.0, Appendix X
		The impact statement will also present an assessment of the effectiveness of the proposed technically and economically feasible mitigation measures.	Section 6.4
		The reasons for determining if the mitigation measure reduces the significance of an adverse effect will be made explicit.	Section 6.4

	Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
		The EIS will indicate what other technically and economically feasible mitigation measures were considered, including the various components of mitigation, and explain why they were rejected.	Section 2.0 and Appendix X
		Trade-offs between cost savings and effectiveness of the various forms of mitigation will be justified.	Section 2.0 and Appendix X
		The EIS will identify who is responsible for the implementation of these measures and the system of accountability.	Sections 1.0 and 9.0
		Where mitigation measures are proposed to be implemented for which there is little experience or for which there is some question as to their effectiveness, the potential risks and effects to the environment should those measures not be effective should be clearly and concisely described. In addition, the EIS will identify the extent to which technology innovations will help mitigate environmental effects. Where possible, it will provide detailed information on the nature of these measures, their implementation, management and the development of the Follow-up Program as described in section 11.4.	Section 6.4
74	11.1.2	Summary of Environmental Mitigation	Section 7.0
		In addition, the EIS will summarize the mitigation measures, follow-up and related commitments identified to address the categories of environmental effects specified in section 10:	Section 6.4
		– Changes to components of the environment within federal jurisdiction;	Section 6.4
		– Changes to the environment that would occur on federal or transboundary lands;	Section 6.4
		– Changes to the environment that are directly linked or necessarily incidental to federal decisions;	Section 6.4
		– Effects of changes to the environment on Aboriginal peoples; and	Section 6.4
		– Effects of changes to the environment that are directly linked or necessarily incidental to federal decisions.	Section 6.4
75	11.2	Measures to address impacts on Aboriginal rights	
		This section will describe the measures identified to mitigate the potential adverse impacts of the project described in section 10.2 on the potential or established Aboriginal and Treaty rights and related interests identified in section 9.2. These measures should be written as specific commitments that clearly describe how the proponent intends to implement them. This description will include a summary of:	Sections 8.5, 8.9 and 9.0, Appendix DD
		– Specific suggestions raised by Aboriginal groups for mitigating the potential adverse impacts of the project on potential or established Aboriginal and Treaty rights and related interests in relation to environmental effects specified in sections 10.1.2 and 10.1.3;	Sections 8.5, 8.9 and 9.0, Appendix DD
		– Environmental mitigation measures identified in section 11.1 that also serve to address potential adverse impacts on potential or established Aboriginal and Treaty rights and related interests ;	Sections 8.5, 8.9 and 9.0, Appendix DD
		– Any potential cultural, social and/or economic impacts or benefits to Aboriginal groups that may arise as a result of the project;	Sections 8.5, 8.9 and 9.0, Appendix DD
		– Where and how Aboriginal traditional knowledge or other Aboriginal views were incorporated into the mitigation of environmental effects of potential adverse impacts on potential or established Aboriginal and Treaty rights and related interests; and	Sections 8.5, 8.9 and 9.0, Appendix DD

Reference	Environmental Impact Statement Guidelines		Location in EIS
No.	Section	Required Content	
		– Efforts undertaken to engage with Aboriginal groups as part of developing the information identified above.	Sections 8.5, 8.9 and 9.0, Appendix DD
		In preparing the EIS, the proponent will ensure that Aboriginal people and groups have access to the information that they require in respect of the project and of how it may impact them. The proponent will describe all efforts, successful or not, taken to solicit the information required to prepare the EIS.	Sections 8.5, 8.9 and 9.0, Appendix DD
		The proponent will structure its Aboriginal engagement activities to provide adequate time for Aboriginal groups to have reviewed the relevant information in advance and to ensure there are sufficient opportunities for individuals and groups to provide oral input in the language of their choosing. Consultation activities must be appropriate to the groups' needs and should be arranged through discussions with the groups.	Sections 8.5, 8.9 and 9.0, Appendix DD
76	11.3	Measures to address public concerns	
		This section will describe measures identified for addressing public concerns in relation to the project identified in section 10.3. Measures should be written as specific commitments that clearly describe how the proponent intends to implement them.	Section 8.8 and Appendix V
		For any consultations undertaken with the general public, the EIS will describe the ongoing and proposed consultations and information sessions with respect to the project at the local, regional and provincial levels, where applicable.	Section 8.8 and Appendix V
		The EIS will provide a summary of discussions, indicate the methods used and their relevance, locations, the persons and organizations consulted, the concerns raised, the extent to which this information was incorporated in the design of the project as well as in the EIS, and the resultant changes.	Section 8.8 and Appendix V
		The proponent will also provide a description of efforts made to distribute project information and provide a description of information and materials that were distributed during the consultation process.	Section 8.8 and Appendix V
77	11.4	Follow-Up Program	
		The EIS should describe the proposed Follow-up Program in sufficient detail to allow independent judgment as to the likelihood that it will deliver the type, quantity and quality of information required to reliably verify predicted effects (or absence of them), and to confirm both the assumptions and the effectiveness of mitigation.	Section 13.0
		The Follow-up Program should include specific commitments that clearly describe how the proponent intends to implement them.	Section 13.0
		The Follow-up Program will be designed to incorporate baseline data, compliance data (such as established benchmarks, regulatory documents, standards or guidelines) and real time data (such as observed data gathered in the field).	Section 13.0
		The proponent will describe the reporting methods to be used, including frequency, methods and format.	Section 13.0
		The effects predictions, assumptions and mitigation actions that are to be tested in the follow-up program must be converted into field-testable monitoring objectives. The monitoring design must include a statistical evaluation of the adequacy of existing baseline data to provide a benchmark against which to test for project effects, and the need for any additional pre-construction or pre-operational monitoring to establish a firmer project baseline.	Section 13.0

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
		The description of the Follow-up Program must include any contingency procedures/plans or other adaptive management provisions as a means of addressing unforeseen effects or for correcting exceedances as required to comply or to conform to benchmarks, regulatory standards or guidelines.	Section 13.0
		The Follow up Program must also be designed to monitor the implementation of mitigation measures resulting from Aboriginal consultation, including:	Section 13.0
		– Verifying predictions of environmental effects with respect to Aboriginal peoples, as well as residual impacts that could not be addressed within the context of the EA;	Section 13.0
		– Determining the effectiveness of mitigation measures as they relate to environmental effects with respect to Aboriginal peoples in order to modify or implement new measures where required;	Section 13.0
		– Supporting the implementation of adaptive management measures to address previously unanticipated adverse environmental effects with respect to Aboriginal peoples or unanticipated adverse impacts to Aboriginal rights;	Section 13.0
		– Verifying measures identified to prevent and mitigate potential adverse effects of the project on potential or established Aboriginal and Treaty rights; and,	Section 13.0
		– Providing information that can be used to improve and/or support future EAs and Aboriginal consultation processes.	Section 13.0
78	11.5	Proponent Commitments	
		Each commitment should be specific, achievable, measurable and verifiable, and described in a manner that avoids ambiguity in intent, interpretation and implementation.	Section 9.0
		12 RESIDUAL EFFECTS	
		12.1 Residual and cumulative environmental effects	
79	12.1.1	<u>Residual environmental effects</u>	
		After having established the technically and economically feasible mitigation measures, the EIS should present any residual environmental effects of the project on the biophysical and human environments after these mitigation measures have been taken into account. The residual effects, even if very small or deemed insignificant should be described.	Section 6.4
80	12.1.2	<u>Cumulative environmental effects</u>	
		The proponent will identify and assess the project’s cumulative effects using the approach described in the Agency’s Operational Policy Statement Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act (November 2007).	Section 7.0
		The EIS will describe the analysis of the total cumulative effect on a VC over the life of the project, including the incremental contribution of all current and proposed physical activities, in addition to that of the project. The EIS will include different forms of effects (e.g. synergistic, additive, induced, spatial or temporal) and identify impact pathways and trends.	Section 7.0
		The EIS will include a narrative discussion of existing projects in the vicinity of the proposed project. The narrative will include the description of any existing studies of changes to the environment resulting from those projects that are similar to potential changes resulting from the project, including any mitigation measures that were implemented, and any long term monitoring or follow up program that were conducted.	Section 7.0

	Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
		The effectiveness of those mitigation measures and key results of monitoring or follow-up programs will be described. This narrative discussion should include historical data, where available and applicable, to assist interested parties to understand the potential effects of the project and how they may be addressed.	Section 7.0
81	12.1.3	Summary of residual environmental effects	
		In addition, the EIS will summarize the residual environmental effects (including cumulative environmental effects) identified in relation to the categories of environmental effects specified in sections 10.1.2 and 10.1.3:	Section 6.4
		– Changes to components of the environment within federal jurisdiction;	Section 6.4
		– Changes to the environment that would occur on federal or transboundary lands;	Section 6.4
		– Changes to the environment that are directly linked or necessarily incidental to federal decisions;	Section 6.4
		– Effects of changes to the environment on Aboriginal peoples; and	Section 6.4
		– Effects of changes to the environment that are directly linked or necessarily incidental to federal decisions.	Section 6.4
82	12.2	Outstanding Aboriginal issues	
		This section will describe the potential adverse impacts on potential or established Aboriginal and Treaty rights and related interests that have not been fully mitigated as part of the environmental assessment and associated consultations with Aboriginal groups. This includes potential adverse impacts (on potential or established Aboriginal and Treaty rights and related interests) that may result from the residual and cumulative environmental effects described in section 10.2.	Section 6.4 and Appendix DD
83	12.3	Outstanding public concerns	
		This section will describe the outstanding public concerns in relation to the project that have not been resolved as a result of changes to the project, mitigation measures, or public consultation.	Section 8.0 and Appendix X
	13	SIGNIFICANCE DETERMINATION	
	13.1	Significance of adverse environmental effects	
84	13.1.1	Methodology	
		This section will provide a detailed analysis of the significance of the residual environmental effects (including cumulative environmental effects) that are considered adverse, using the approach described in the Agency's Reference Guide Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects (November 1994).	Sections 6.0 and 7.0
		The EIS will identify the criteria used to assign significance ratings to any predicted adverse effects. It will contain clear and sufficient information to enable the Agency, technical and regulatory agencies, Aboriginal groups and the public to review the proponent's analysis of the significance of effects. The proponent will define the terms used to describe the level of significance. The following elements should be used in determining the significance of residual effects:	Section 6.1
		– Magnitude;	Section 6.1
		– Geographic extent;	Section 6.1
		– Timing, duration and frequency;	Section 6.1
		– Reversibility;	Section 6.1

Reference		Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
		- Ecological and social context; and	Section 6.1
		- Existence of environmental standards, guidelines or objectives for assessing the impact.	Section 6.1
		In assessing significance against these criteria the EIS will, where possible, employ relevant existing regulatory documents, environmental standards, guidelines, or objectives such as prescribed maximum levels of emissions or discharges of specific hazardous agents into the environment.	Section 6.4
		Where significant adverse effects are identified, the EIS will set out the probability (likelihood) that they will occur, and describe the degree of scientific uncertainty related to the data and methods used within the framework of its environmental analysis.	Section 6.4
85	13.1.2	<u>Summary of significant adverse environmental effects</u>	
		In addition, the EIS will summarize the significant adverse environmental effects identified in relation to the categories of environmental effects specified in sections 10.1.2 and 10.1.3:	Section 6.4
		- Changes to components of the environment within federal jurisdiction;	Section 6.4
		- Changes to the environment that would occur on federal or transboundary lands;	Section 6.4
		- Changes to the environment that are directly linked or necessarily incidental to federal decisions;	Section 6.4
		- Effects of changes to the environment on Aboriginal peoples; and	Section 6.4
		- Effects of changes to the environment that are directly linked or necessarily incidental to federal decisions.	Section 6.4
		14 SUMMARY TABLES	
86		The EIS should contain a series of tables summarizing the following key information:	
		- Potential environmental effects (section 10.1), adverse impacts on potential or established Aboriginal and Treaty rights and related interests (section 10.2) and public concerns (section 10.3);	Section 14.0
		- Proposed mitigation measures and commitments (section 11.5) by proponent to address potential impacts on environment, (section 11.1), Aboriginal rights (section 11.2) and public concerns (section 11.3), and Follow-up Program (section 11.4);	Section 14.0
		- Potential residual and cumulative environmental effects (section 12.1); outstanding Aboriginal issues (section 12.2) and outstanding public concerns (section 12.3);	Section 14.0
		- Comments from the public and responses;	Section 14.0
		- Comments from Aboriginal groups and individuals and responses; and	Section 14.0
		- Relationship of the identified Valued Components (section 7.1.1) to Aboriginal groups' potential or established Aboriginal and Treaty rights and related interests (section 9.2).	Section 14.0

	Reference	Environmental Impact Statement Guidelines	Location in EIS
No.	Section	Required Content	
		15 BENEFITS TO CANADIANS	
87	15.1	Changes to the project since initially proposed	
		The EIS will include a summary of the changes that have been made to the project since originally proposed, including the benefits of these changes to the environment, Aboriginal peoples, and the public.	Section 10.1
88	15.2	Benefits of the project	
		The EIS will include a section describing the predicted environmental, economic and social benefits of the project. This information will be considered in assessing the justifiability of the significant adverse environmental effects, if necessary.	Section 10.2
89	16	MONITORING PROGRAM AND ENVIRONMENTAL MANAGEMENT PLANS	
		In the EIS, the proponent will describe the monitoring activities at all stages of the project, the proponent's proposed commitment to implementing these activities and the resources provided for this purpose. The program will need to provide the key information such as contacts, protocols, measured parameters, deadlines, intervention in case of non-compliance of legal requirements and production of monitoring reports.	Section 13.0