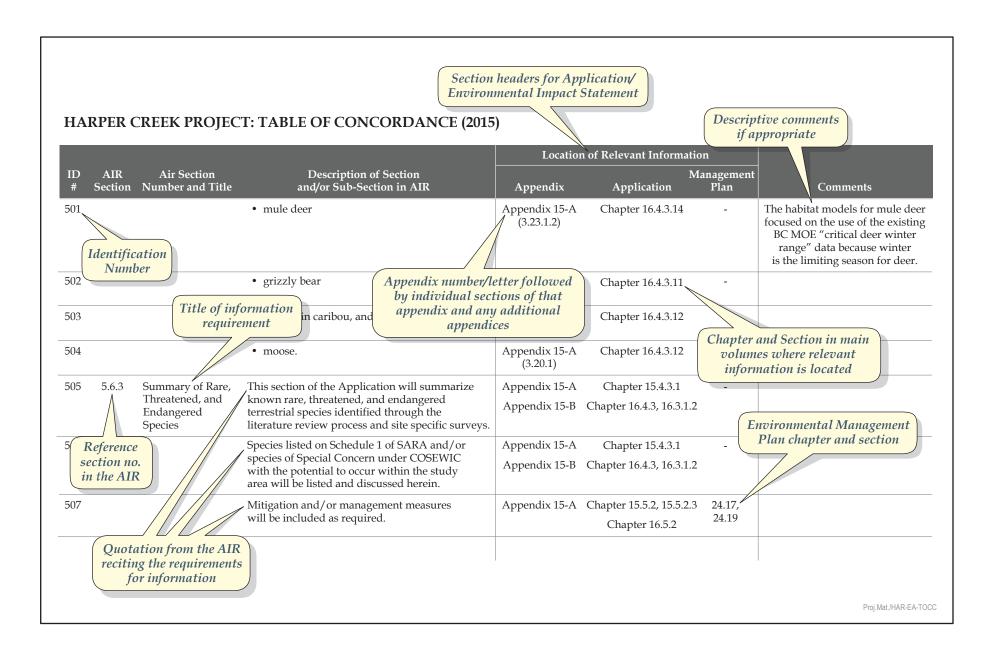
## TABLE OF CONCORDANCE

This section provides a comprehensive Table of Concordance, as required by the Application Information Requirements (AIR). The intent of the tables are to cross-reference the final AIR with the Application/Environmental Impact Statement (including appendices) so that the information requested can be readily found in the Application/Environmental Impact Statement.

The Table of Concordance is divided into two main parts: (i) *Application Information Requirements* and (ii) *Application/Environmental Impact Statement*, with a final column for comments. The table presents the final AIR, as direct quotes in the *Description* column in the same order they appear in the final AIR. Columns on the left-hand side of the tables provide the *Section No., Title*, and *Description* from the final AIR. The right-hand side of the table provides the corresponding section of the Application/Environmental Impact Statement, with columns for cross-references to *Appendix, Main Volume Chapter No., Section*, and *Environmental Management Plan*. On the far right, there is a column for descriptive comments, if appropriate.

The figure on the following page provides an annotated illustration of the Tables of Concordance.



## HARPER CREEK PROJECT: TABLE OF CONCORDANCE (2015)

	AIR	AIR Section Number and			Location of Relevant Informati	ion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
1		Table of Contents	This section provides an outline of all document components, including volumes, sections, sub-sections, and a list of tables, figures, photographs, and appendices used in the AIR. This Table of Contents provides the structure for organizing information to be presented in the Application. Any deviation from this outline will be discussed with the EAO project lead prior to making any changes, and any discrepancies will be identified in the Table of Concordance.	-	Table of Contents	-	
2		Acknowledgements	This section of the Application will identify and acknowledge the contributions of the YMI project team, regulatory agencies, First Nations, key stakeholders, and others who have contributed to the preparation of the EA Application. This section will also note the independent reports that professionals have contributed to the Application. These will be signed by the professionals responsible for the report content.	-	Acknowledgements	-	
3		Executive Summary	The Application's Executive Summary will provide a brief description of the following components of the Application:	-	Executive Summary	-	
4			A brief description of the Project	-	Executive Summary	-	
5			Summary of the consultations undertaken	-	Executive Summary	-	
6			Summary of the Project benefits	-	Executive Summary	-	
7			Summary of the issues and potential impacts identified	-	Executive Summary	-	
8			Summary of the recommended mitigation measures	-	Executive Summary	-	
9			Summary of the potential cumulative impacts and residual effects	-	Executive Summary	-	
10			Summary of First Nations' considerations	-	Executive Summary	-	
11			Summary of the follow up programs proposed (if applicable), and	-	Executive Summary	-	
12			Proponent conclusions from the EA with a statement regarding the key conclusions of the impact	-	Executive Summary	-	
13		List of Abbreviations	A final list of acronyms and abbreviations used in the Application will be presented in this section.	-	Acronyms and Abbreviations	-	
14		Table of Concordance	The Application will contain a Table of Concordance that clearly indicates how the requirements contained in the approved AIR have been met by the information provided in the Application.	-	Table of Concordance	-	
15		Preface to the Application	This section of the AIR outlines the information that will be included as part of the Preface of the final EA document. The Preface to the Application will:	-	-	-	
16			State that the Project is subject to review under the BC Environmental Assessment Act and the trigger(s) for the review	-	Preface to the Application/EIS	-	
17			If confirmed, state that the Project is subject to federal Environmental Assessment and list the identified triggers for review	-	Preface to the Application/EIS	-	
18			<ul> <li>State that the Project will undergo a harmonized review process (if applicable)</li> </ul>	-	Preface to the Application/EIS	-	

	AIR	AIR Section Number and			Location of Relevant Informatio	n	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
19			<ul> <li>State that the Application has been developed pursuant to the AIR approved by the EAO with input from the Canadian Environmental Assessment Agency (where applicable), and complies with relevant instructions provided in Orders issued by the EAO</li> </ul>	-	Preface to the Application/EIS	-	
20			<ul> <li>If required, state that the Application has been developed pursuant to federal information requirements as communicated by the CEA Agency and/or federal responsible authorities</li> </ul>	-	Preface to the Application/EIS	-	
21			<ul> <li>Identify the regulatory agencies, First Nations, and other interested parties involved in the development of the Application, and</li> </ul>	-	Preface to the Application/EIS	-	
22			<ul> <li>Include a table of concordance that cross-references the information presented in the Application with the information requirements identified in the approved AIR document.</li> </ul>	-	Table of Concordance	-	
23	1	Purpose of the Application	This section will explain the purpose of the Application and detail specific structural components of the document.	-	Preface to the Application/EIS	-	
24			It will indicate that the Application fulfils the requirements of the provincial EA process, as well as the federal requirements for an EA decision, if applicable.	-	Preface to the Application/EIS	-	
25			It will also provide a summary of any legal orders or agreements applying to the review of the Project, where appropriate.	-	Preface to the Application/EIS	-	
26	1.1	Introduction	This section will provide context and background to the purpose and organization of the Application.	-	Chapter 1.1, Executive Summary, Preface	-	
27	1.2	Purpose and Understanding of the Environmental Assessment Process and Regulatory Framework	The statutes of most relevance to this Project are expected to include the following:	-	-	-	
28		Federal Legislation	Canadian Environmental Protection Act	-	Chapter 2.2	-	
29			Explosives Act	-	Chapter 2.4.2	-	
30			Fisheries Act	-	Chapter 2.4.2 Chapter 14.2	-	
31			Metal Mining Effluent Regulations	-	Chapter 13.2 Chapter 14.2	Section 24.6	
32			Navigable Water Protection Act	-	Chapter 18.2	-	The Project is subject to the Navigation Protection Act
33			Migratory Birds Convention Act, and	-	Chapter 16.2	-	
34			• Species at Risk Act.	-	Chapter 14.2 Chapter 16.2 Chapter 15.2.2	-	
35		Provincial Legislation:	Environmental Management Act, British Columbia	-	Chapter 2.3.2 Chapter 2.4.1 Chapter 9.2 Chapter 15.2.10	-	
36			Environmental Assessment Act	-	Chapter 2.1	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
37			Drinking Water Protection Act	-	Chapter 2.4.1	-	
					Chapter 21.2.3		
38			• Forest Act	-	Chapter 2.4.1	-	
39			Forest Practices Code of British Columbia	-	Chapter 2.4.1	-	
40			Forest and Range Practices Act	-	Chapter 2.4.1	-	
					Chapter 15.2.4		
					Chapter 16.2		
41			Health Act	-	Chapter 2.4.1	-	
42			• Mines Act	-	Chapter 2.4.1	-	
					Chapter 7.1		
43			• Water Act	-	Chapter 2.4.1	-	
					Chapter 11.2 Chapter 18.2		
44			Fish Protection Act				
44				-	Chapter 14.2	-	
45			• Wildlife Act, and	-	Chapter 2.4.1 Chapter 16.2	-	
46			Weed Control Act.		Chapter 15.2.6	_	
47		Other Guidance Documents:		-			The Dunient will not used in a Calculate 2 Amond Juneau
4/		Other Guidance Documents:	• Guidelines for the Assessment of Alternatives for Mine Waste Disposal (Environment Canada 2011)	-	Chapter 4.2	-	The Project will not require a Schedule 2 Amendment to the Metal Mining Effluent Regulations, so the Guidelines are not relevant to the Project
48			Action Plan for Safe Drinking Water in British Columbia	-	Chapter 21.2.3	-	
49			Waste Discharge Regulation	-	Chapter 21.2.1	-	
50			Hazardous Waste Regulation	-	Chapter 2.4.1	-	
					Chapter 21.2.1		
51			Municipal Sewage Regulation	-	Chapter 2.4.1	-	The Municipal Sewage Regulation was replaced by the Municipal Wastewater Regulation in 2011.
52			Permit Fees Regulation	-	Chapter 2.4.1	-	
53			Petroleum Storage and Distribution Facilities Storm Water Regulation	-	Chapter 2.4.1	-	
54			Public Notification Regulation, and	-	Chapter 2.4.1	-	
55			Spill Reporting Regulation.	-	Chapter 2.4.1	Section 24.15	
56	1.3	Purpose and Understanding of the Application Information Requirements	This section will state that the AIR document for the proposed Project was approved by the EAO and will include the date the AIR was approved.	-	Chapter 2.3.2.1, 2.3.2.2	-	
57			It will note that the approved AIR document was prepared as directed by the EAO under Section 11 of the BCEAA on September 18, 2008.	-	Chapter 2.3.2.3	-	
58			This section will also discuss the intent of the approved AIR, in that the document identifies information that must be included in the Application.	-	Chapter 2.3.3	-	
59	2	Proposed Project Description	This section of the Application will provide details and background to the	-	Chapter 5.2	-	
			proposed Project.		Chapter 5.3		

	AIR	AIR Section Number and			Location of Relevant Informat	ion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
60			It will introduce the reader to the rationale and purpose for development.	-	Chapter 1.4	-	
61			It will provide details such as Project location, size, scheduling, mine	-	Chapter 1.9.1	-	
			components, and anticipated costs.		Chapter 5.2		
					Chapter 5.3		
					Chapter 5.7		
					Chapter 5.8		
					Chapter 5.14		
62			A description of the Project objectives, Project planning and history to date	-	Chapter 1.3	-	
			will also be included. It will describe any sustainable principles used to guide Project planning.		Section 24.1		
63			It will also touch on the Project management and monitoring programs	-	Chapter 5.7.2.9	-	
			which will be discussed in more detail in Part B of the Application.		Chapter 24		
					Chapter 28.5.4		
64			Figures, photographs, and site plans will be included, as appropriate, to	-	Chapter 1.6.1 to 1.6.3	-	
			depict the regional setting, Project layout, site features, and the location of		(Figures 1.1-1, 1.1-2, 1.5-1,		
			various activities.		1.6-1, 1.6-2)		
65			This section will provide details regarding the current land status (Crown	-	Chapter 1.5.1	-	
			Land, First Nations lands and/or private land).		Chapter 1.6.2, 1.6.3		
					Chapter 22		
66			It will indicate the rights held by YMI.	-	Chapter 1.5.2, 1.5.3	-	
					Chapter 5.2.2		
67			It will provide a list of existing mineral tenures and ownership status (both	-	Chapter 1.5.3 (Figure 1.5-2)	-	
			in the Project area and near the Project area).		Chapter 1.6.1, 1.6.2		
					Chapter 5.2.2		
68			The Application will indicate the estimated labour force required during the mine construction component of the Project in person years.	-	Chapter 1.9.3.2	-	
69			It will indicate the labour force required once the mine is fully operational (direct jobs only).	-	Chapter 1.9.3.3	-	
70			It will also provide the assumed number of permanent and temporary full- time and part-time positions per year at full-scale operation.	-	Chapter 1.9.3.3	-	
71					Chamter 1 0 F 1 0 /		
71			It is believed this project will provide economic benefits to the surrounding communities and these projected economic benefits will also be discussed.	-	Chapter 1.9.5, 1.9.6	-	
72			This section will also provide a capital cost estimate for the Project,	-	Chapter 1.9.1, 1.9.2	_	
			including anticipated total front-end pre-production mine construction costs.		<u>-</u>		
73	2.1	Proponent Description	The Application will provide a detailed description of YMI including its history, the type of company it is, affiliations, headquarters location, contact information such as names of key personnel, company address, web site, phone, fax and email.	-	Chapter 1.2.1	-	
74			The names and relevant contact information will be provided for the individuals managing the Project.	-	Chapter 1.2.2	-	

	AIR	AIR Section Number and			Location of Relevant Informati	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
75			This section will identify and summarize the BC EA trigger(s) in the	-	Chapter 1.1	-	
			Application.		Chapter 5.1.1		
76			If confirmed, CEAA trigger(s) will also be identified and summarized.	-	Chapter 1.3.2 to 1.3.3	-	
					Chapter 5.1.2		
77	2.2.1	Location of Project and Mapping	The Application will include maps, aerial photographs, and figures that clearly depict the Project location and the longitude and latitude. Maps	-	Chapter 5.1 Chapter 5.2.1 to 5.2.3	-	
		11 0	will be appropriately scaled so that site layout and regional setting of		(Figures 5.1-1, 5.1-2, 5.7-1,		
			Project activities and components can be easily identified and so that		5.7-2, 5.7-3, 5.7-4, 5.8-1, 5.8-2,		
			proximities to natural features, cultural sites, and environmentally		5.8-3, 5.8-4, 5.9-1, 5.9-2, 5.9-4)		
			sensitive areas are clearly visible. Regional context will also be depicted and will identify nearby communities, other mines, and industrial				
			activities, if applicable.				
			Site plans, drawings, and photographs will be used to further depict the	Appendix 5-A	Chapter 5	-	
			Project location, various site features, and activities identified on the maps	(Figure 18-1)-	Figure 5.1-1, 5.1-2, 5.2-1		
			provided in the Application.				
78	2.2.2	Project History	This section will provide the relevant history of the Project site and discuss topics such as past mineral exploration.	-	Chapter 5.3.1 to 5.3.4	-	
79			The Application will also discuss information pertaining to the mineral	-	Chapter 1.5.3	-	
			tenures within the area and those held by YMI.		Chapter 5.2.2		
80	2.2.3	Project Geology	This section of the Application will provide an introduction and	-	Chapter 5.5.1 to 5.5.2	-	
			background to the regional and site specific geology based on a literature review of existing information.				
81			It will also include descriptions of local terrain, landforms, and soils.	Appendix 5-A-	Chapter 5.4.1 to 5.4.3	-	
81			The section will include discussions on how field data was used to prepare descriptions of deposit geology, mineralization, alternation, and structural controls.	-	Chapter 5.5.3 to 5.5.7	-	
83			It will also describe and map the physical (spatial) boundaries of the Study	Appendix 5-B	Chapter 5.4.1, 5.4.3	-	
			Area as required.		Figure 5.5-1		
84			Geological cross sections, including a set of cross sections that are	Appendix 5-A,	Chapter 5.5, 5.5.1, 5.5.2, 5.5.3	-	
			perpendicular to one another may also be included.	5-H	Chapter 6.3		
85			This section will include a discussion of the deposit geology and its relationship to the mine development plan and the ML/ARD potential.	-	Chapter 5.5.6.1	-	
86			The Application will describe the lithology, faults, and fractures and	Appendix 5-A	Chapter 5.5.3 to 5.5.4	-	
			describe seismic events that occurred in the region.	Appendix 5-F	Chapter 27.5.3		
87			The description will be illustrated where appropriate by maps, figures,	Appendix 5-A,	Chapter 5, 5.5	-	
			and cross sections.	5-H	Figure 5.5-1		
					Chapter 6.3		
88			This subsection will also describe the terrain, landforms, and soils for the regional and local study areas.	Appendix 5-B	Chapter 5.4.1, 5.4.2	-	
89			A geohazard assessment for the regional and local study areas will be included.	Appendix 5-C	Chapter 5.4.3	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
90			Geotechnical properties of pit mine materials, waste rock foundation materials, and tailings pond (dyke) foundation materials will be characterized, based on results from drilling, test pits, and sampling programs.	-	Chapter 5.5.6.1, Chapter 6	-	
91			The Application will include an overview of the terrain, soils, and surficial materials found within and around the Project area. It will describe the lithology, faults, fractures, and describe seismic events that have occurred in the area.	-	Chapter 5.4.1, 5.4.2 Chapter 5.5.3, 5.5.4	-	
92a	2.2.4	Project Geochemistry	Based on the site reconnaissance and geologic database review, an ML/ARD program has been initiated which will consist, as appropriate, of both static and kinetic components designed to provide geochemical information on the materials. Information that will be generated by the ML/ARD program will include:  • The acid generating potential	Appendix 6-A Appendix 13-E	Chapter 6.3.3 Chapter 13.5.2.3	-	
92b			The neutralizing potential	Appendix 6-A	Chapter 6.3.3	-	
93			The elemental reservoir within materials that are potentially available for leaching	-	Chapter 6.3.3	-	
94			Short term elemental loading rates to the downstream environment	Appendix 13-A	Chapter 13	-	
95			Mineralogy	-	Chapter 6.3.3	-	
96			<ul> <li>Assessment of the lag time to onset of ARD or significant metal leaching for all mine materials, if rocks are determined to be potentially acid generating (PAG) or metal leaching</li> </ul>	Appendix 13-C3 (Section 3.9)	Chapter 6.6 Chapter 13.5.4	-	
97			<ul> <li>Delineation of geochemical source terms and describe methods used in geochemical modelling; and</li> </ul>	-	Chapter 6.4.1, 6.4.2	-	
98			Long term elemental loading rates to the downstream environment.	Appendix 13-A		-	
99	2.2.5	Project Facilities	The following information will be presented in the Application:	-	Chapter 5	-	
100			<ul> <li>A summary of all on-site components and associated on-site and off- site infrastructure and other facilities associated with the proposed Project, including figures of layouts</li> </ul>	-	Table 5.8-1 Chapter 5.8.1 to 5.8.4 Figure 5.1-2 Chapter 5.9.1 to 5.9.11 Chapter 5.11.1 to 5.11.8	-	
101			<ul> <li>A description of the activities associated with construction, operation and decommissioning of the proposed Project, including schematic representations of activities, where applicable</li> </ul>	-	Chapter 5.7.1 to 5.7.3 Chapter 5.8.1 to 5.8.3 Table 5.8-1	-	
102			<ul> <li>A description of the capital construction phase and the length or lifetime of the proposed Project in years, and</li> </ul>	-	Chapter 5.7.1, 5.7.2	-	
103			<ul> <li>A summary of the environmental management system and adaptive management approach for the proposed Project.</li> </ul>	-		Sections 24.1, 24.1.3, 24.1.6, 24.2-	
104			The scope of the proposed Project includes the following components and activities:	-	Chapter 2	-	
105			<ul> <li>Construction, operation/maintenance, and closure of an Open Pit to produce approximately 600mt of mill feed over the estimated mine life</li> </ul>	-	Chapter 5.7.1.2, 5.7.2.2, 5.7.3.2 Chapter 5.9.1, 5.9.8 Chapter 7.6.1	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
106			Construction, operation/maintenance, and closure of Mine Site Area infrastructure (Plant Site, Haul Roads, Explosives Storage and Manufacturing, and Fuel Tank Farm)	-	Chapter 5.7.1.3, 5.7.1.4, 5.7.1.9, 5.7.1.11, 5.7.2.5, 5.7.2.6, 5.7.3.2  Chapter 5.8.3  Chapter 5.9.1, 5.9.6, 5.9.7  Chapter 7.6	-	
107			Construction, operation/maintenance, and closure of a Tailings     Management Facility with no planned surface discharge	Appendix 5-D-	Chapter 5.7.1.5, 5.7.2.1, 5.7.3.1 Chapter 5.8.2 Chapter 7.5.3, 7.7	-	The original Application had no planned discharged from the TMF. The current Project design includes a discharge from the TMF during the Closure and Post-Closure phases.
108			Construction, operation/maintenance, and closure of Waste Rock Disposal Areas	-	Chapter 5.7.2.4, 5.7.3.1 Chapter 5.9.3.2 Chapter 7.6.2	-	
109			Construction, operation/maintenance, and closure of a Low Grade Stockpile	-	Chapter 5.7.3.2 Chapter 5.8.1 Chapter 5.9.1, 5.9.3.3 Chapter 7.5.4, 7.6.3	-	
110			Minor upgrades and maintenance of the existing Jones Creek and/or the Vavenby Mountain Forest Service Roads	-	Chapter 5.7.1.3 Chapter 5.8.3, 5.9.8, 5.11.6	Section 24.9	
111			Construction, operation/maintenance, and closure of Off-Site Infrastructure in Vavenby, and	-	Chapter 5.7.1.7, 5.9.10, 5.9.11 Chapter 7.6.12	-	
112			<ul> <li>Construction, operation/maintenance, and closure of a 138 kV transmission line from the Plant Site to an existing substation in Vavenby and distribution power lines within the Mine Site Area.</li> </ul>	-	Chapter 5.7.1.6, 5.7.1.13 Chapter 5.8.4 Chapter 7.6.13	-	Power at the Project Site is needed during the Closure and Post-Closure phases of the Project. The power line and site distribution power line are not being closed or reclaimed, although the voltage may decrease.
113			YMI expects to use modern large scale mining equipment including 311mm drills, 42m³ electric-hydraulic shovels, and 240 to 300t trucks together with necessary support equipment. Further details will be included in the Application.	Appendix 5-A	Chapter 5.9.5	-	
114			Crushed Ore Stockpile - An uncovered crushed ore stockpile will be utilized by the mill if the conveyor or primary crusher is temporarily offline. The Application will include a management plan for this stockpile during operations and in the event of early temporary or permanent mine closure.	Appendix 5-D	Chapter 5.9.2.2 Chapter 7.6.8, 7.10	-	
115			Low Grade Ore Stockpile – An uncovered low grade ore stockpile will be developed during the early stages of project operations to facilitate increased processing of high grade ore. This stockpile will be processed at a later stage of the Project. The Application will include a management plan for the low grade ore stockpile during operations and in the event of early temporary or permanent mine closure.	Appendix 5-D	Chapter 5.9.3.3 Chapter 7.6.3, 7.10	-	
116			YMI expects to use conventional, proven chemicals in the flotation process, which will be listed in the Application.	-	Chapter 5.9.2.4	-	

HARPER CREEK MINING CORPORATION

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
117			YMI is currently evaluating options to source any make-up water requirement. Additional details regarding water use and requirements are provided in the Water Management section of the Project Description. Additional information will be included in the Application.	-	Chapter 5.10.3.1, 5.10.3.2	-	
118			Initial engineering studies for the tailing facility, based on similar scale operations in BC, have been completed. Further geotechnical drilling is required for the next design phase in order to arrive at a definitive conclusion regarding the detailed design of the tailings facility. The Application will expand on the information included above.	Appendix 5-D	Chapter 5.8.2	-	
119			Waste Rock Disposal Areas – Two waste management facilities are currently being evaluated. These facilities will likely be located to the west of the proposed pit location. Test work is also ongoing to determine which material is potentially acid generating ("PAG") and which is non-potentially acid generating ("non-PAG"). Further details will be included in the Application.	Appendix 5-D-	Chapter 5.7.2.4 Chapter 5.9.3.2	Section 24.9	
120			The details of the waste rock management facilities and alternative dump locations will be included in the Application.	-	Chapter 4.4.3.2, 4.4.9.2, 4.4.10	-	
121			The Application will outline the rationale and geochemistry to support segregation of waste rock to the TMF and demonstrate that this mitigation plan is operationally feasible.	-	Chapter 5.5.6 Chapter 6.4.2.3	-	
122			Other Facilities – Other facilities may be required on-site such as maintenance facilities, offices, and staff accommodation; however, a staging area for these facilities is being considered off-site. Details regarding these items will be provided in the Application.	-	Chapter 5.11.4	Section 24.18, Section 24.19	
123			The routing of the transmission line is being investigated as part of the feasibility study and will be presented in the Application.	-	Chapter 5.7.1.13	-	
124			Due to the increased usage of the roads on the trucking route, various safety measures will be implemented, including proper training of personnel and emergency response measures for use during transport. Further details will be included in the Application.	-	Chapter 5.7.1.17	Section 24.4 Chapter 24.16	
125			The extent to which these access roads will need to be upgraded will be evaluated as part of the feasibility study and explained in more detail in the Application.	-	Chapter 5.7.1.1 to 5.7.1.3 Chapter 5.8.3	-	
126			The transport of petroleum products and other potentially hazardous materials, as applicable, will also be discussed in this section of the Application.	-	Chapter 5.7.1.9, 5.7.2.5 Chapter 5.11.1, 5.11.3	-	
127			<b>Site Water Management</b> – The Application will include details regarding approaches to site water management. This will address items such as freshwater supply, potable water supply, process water supply, water reclaim systems, surface drainage management, seepage management approaches, pit dewatering activities, and sewage treatment.	Appendix 5-D-	Chapter 5.9.2.10 Chapter 5.10.2 Chapter 5.11.2	-	
128			The Application will include information about a method for obtaining additional process water that may be required as a contingency in the water balance. All water management facilities and diversion structures will include a conceptual design for clearly specified peak flow events.	Appendix 5-D Appendix 12-B (Sections 3.5; 5.7)	Chapter 5.10.4	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
129	2.2.6	Construction – Phase Activities	The Application will discuss construction related activities such as site- clearing, foundations, utilities, and building structures in addition to the intended approaches for the delivery of services and the associated logistics.	-	Chapter 5.7.1, 5.8 to 5.11	-	
130			Details regarding important components of on-site and off-site facilities such as potable water supply	-	Chapter 5.11.2	-	
131			waste disposal	-	Chapter 5.7.1.15	Chapter 24.9 Chapter 24.18	
132			energy supply	-	Chapter 5.7.1.6, 5.7.1.13	-	
133			traffic management	-	Chapter 5.11.6	-	
134			operating workforce services	-	Chapter 5.11.7 Chapter 5.13	-	
135			emergency procedures	-	Chapter 5.11.8	Section 24.2	
136			maintenance procedures will also be included.	-	Chapter 5.7.1.16, 5.8.1 (Table 5.8-1), 5.9.10, 5.11.1, 5.11.4	-	
137			A construction schedule based on the most available and current information will be submitted with the Application and figures of the activities will be included, where applicable.	Appendix 5-A (Section 24.2.2, 24.2.10) (Section 16.1.3) (Table 1-10) (Table 16-2) (Figure 24-2)-	Chapter 1.8 Chapter 5.6, 5.7, 5.7.1.11, 5.8, 5.12 (Table 5.12-1) (Table 5.6-3) (Table 5.7-1)	-	
138			This section will include information about the availability and appropriateness of materials required for construction.	-	Chapter 5.7.1.8, 5.7.1.10	-	
139	2.2.7	Operations - Phase Activities	The Application will detail the proposed resource extraction methods and associated activities including maintenance	-	Chapter 5.1, 5.7.2.1	-	
140			The Application will discuss the intended approach for delivery of services required for the operating phase of the Project. The resource extraction activities/components may include but are not limited to the following:	-	Chapter 5.7.2, 5.8 to 5.11	-	
141			Open pit development, design and site location plan, with an estimated production schedule	-	Chapter 5.7.2.2 Chapter 5.9.1 to 5.9.2 (Figure 5.1-2)	-	
142			<ul> <li>Waste rock storage location and/or facility development plan with provisions for waste rock sequencing</li> </ul>	-	Chapter 5.7.2.4 Chapter 5.9.3.2	-	
143			Process plant development, design and site location plan     ML/ARD management plan	-	Chapter 5.1, 5.7.1.4 (Figure 5.1-2) Chapter 5.8.2.2, 5.8.2.3 Chapter 5.9.1.5, 5.9.2, 5.9.10 (Figure 5.8-1) Chapter 5.9.4	- -	
			-, ·		r 101 01311		

	AIR	AIR Section Number and			Location of Relevant Informatio	n	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
145			Topsoil and organic materials storage for site reclamation activities	-	Chapter 5.7.3, 5.9.3.1	-	
					Chapter 7.5.5, 7.6.4		
146			Explosives storage and manufacturing	-	Chapter 5.9.7	-	
147			Tailings facility development, design and site location plan	Appendix 5-D (Figures 1.2 and 6.1 to 6.5)-	Chapter 5.7.1.5, 5.8.2, 5.10.4.2	-	
148			Borrow sources for dam and other facilities construction	-	Chapter 5.9.8	-	
149			On-site storage/stockpiling of ore	-	Chapter 5.9.3.3	-	
150			Transfer and off-site storage of concentrate	-	Chapter 5.9.10, 5.9.11	-	
151			<ul> <li>Water management plan including a description of water management activities such as collection, storage, treatment and method for obtaining additional water</li> </ul>	Appendix 5-D	Chapter 5.10.1 to 5.10.4	-	
152			Crushing and conveying ore	-	Chapter 5.9.2.1	-	
153			Fuel storage and heavy equipment maintenance facility	-	Chapter 5.7.2.5	-	
154			Dangerous goods and hazardous material handling, storage and/or	-	Chapter 5.7.2.6	Section 24.7	
			distribution plan			(Table 24.7-1)-	
155			<ul> <li>Results from condemnation drilling and discussions regarding the relocation of proposed permanent mine structures, if applicable, and</li> </ul>	Appendix 5-A (Section 10.1.2)	Chapter 5.5.7	-	
156			<ul> <li>Detailed locations of proposed road and bridge improvements, if needed.</li> </ul>	-	Chapter 5.2.3, 5.7.1.4, 5.11.5 (Figure 5.8-4)	-	
157			A detailed schedule based on the most available and current information will be included in this section.	Appendix 5-A (Section 24.2.2, 24.2.10) (Section 16.1.3) (Table 1-10) (Table 16-2) (Figure 24-2)-	Chapter 1.8 Chapter 5.6, 5.7, 5.7.1.11, 5.8, 5.12 (Table 5.12-1) (Table 5.6-3) (Table 5.7-1)	-	
158	2.2.8	Decommissioning and Reclamation – Phase Activities	The Application will discuss the proposed activities associated with the decommissioning and reclamation of the Project	-	Chapter 5.7.3 Chapter 7 (all sections)	-	
159			Include conceptual closure and reclamation plans for the site.	-	Chapter 5.7.3 (Figure 5.7-3) Chapter 7.1 to 7.12	-	
160			It will also discuss plans for the treatment of effluent from site facilities.	-	Chapter 7.12.3	Section 24.6 Section 24.9 Section 24.12 Section 24.13	
161			It will detail YMI's projected methods and timing for the removal of structures and ancillary equipment.	-	Chapter 7.5 to 7.8	-	
162			The Application will include the following information concerning reclamation and closure activities and a conceptual final reclamation plan:	-	Chapter 7	-	
163			Regulatory Framework and Requirements	-	Chapter 7.2.1	-	

	AIR	AIR Section Number and			Location of Relevant Informa	tion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
164			Closure and Reclamation Objectives	-	Chapter 7.3.1 to 7.3.3	-	
165			Closure of Mine Infrastructure	-	Chapter 7.5 to 7.7	-	
166			Implementation and Site Supervision, and	Appendix 5-A	Chapter 7.5, 7.6, 7.7	Section 24.1, 24.2 to 24.19	
167			Monitoring and Reporting.	-	Chapter 7.12	-	
168	2.2.9	Capital Construction Phase & Project Longevity	In this section of the Application, the capital construction phase and the length or lifetime of the Project in years will be discussed.	Appendix 5-A	Chapter 5.7.1.1, 5.12 (Table 5.12-1)	-	
169	2.2.10	Environmental Management System	The proposed environmental management system (EMS) for the Project will be outlined and described in this section of the Application.	-		Section 24.1	
170			A component of the EMS will be an Environmental Management Plan (EMP) which will detail the environmental practices that will be utilized during the planning, construction, operations, and decommissioning stages of the proposed Project. The EMPs will provide a baseline for the development of Standard Operational Procedures for overall site operation. EMPs may include the following components as appropriate:	-	Chapter 24	-	
171			Air quality and dust control plan	-		Section 24.2	
172			Wildlife management plan	-		Section 24.19	
173			Vegetation management plan	-		Section 24.17	
174			Reclamation and closure plan	-	Chapter 7 (all sections)	-	
175			Surface water and stormwater management and erosion and sediment control plans	-	Chapter 24.13	Section 24.13	
176			Groundwater monitoring plan	-		Section 24.8	
177			Aquatic effects monitoring plan (e.g. water quality, sediment chemistry, benthic invertebrates, periphyton, fish tissue)	-		Section 24.6, 24.12	
178			Fish habitat compensation planning and follow-up monitoring	Appendix 14-E		Section 24.6, 24.12, 24.16	
179			Materials handling and management	-		Section 24.5, 24.7	
180			Construction waste and hazardous waste management plans	-		Section 24.7, 24.18	
181			Clearing around wildlife sensitivities	-		Section 24.19	
182			Processing plant environmental controls	Appendix 5-A (Section 17)	Chapter 5.9.2 Chapter 9		
183			Accidents and malfunctions planning including emergency/spill response and contaminated site clean up	-		Section 24.15	
184			Soil salvage and storage plan	-		Section 24.14	
185			Noise Management plan	-		Section 24.10	
186			ML/ARD prediction, prevention, management and monitoring plans	-		Section 24.9	

	AIR	AIR Section Number and			Location of Relevant Information	n	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
187			Environmental supervision during work in sensitive areas, such any works in riparian areas, and	-	Chapter 24.1	Section 24.6.3.1, 24.7.3.7, 24.14.3.1, 24.16, 24.17.3, 24.19.3.2	
188			<ul> <li>Archaeological monitoring in high potential areas where a site has not been found (under <i>Heritage Conservation Act</i> permit) to allow rapid intervention by the archaeologist.</li> </ul>	-		Section 24.3	
189			This section will also describe the proposed adaptive management approach for the Project.	-	Chapter 28.5.4	Section 24.1.3	
190	2.3	Provincial Scope of Proposed Project	The Application will discuss the scope of the Project to be assessed in the provincial EA (pursuant to the Section 11 Order).	-	Chapter 2.3.2.1	-	
191	2.4	Federal Scope of Proposed Project	The Application will describe the scope of the Project as directed by the responsible federal authorities in the Application.	-	Chapter 2.3.3	-	
192	2.5	Project Land Use	This section of the Application will describe the land ownership and land use regime	-	Chapter 18.4.1, 18.4.3 Table 18.2-1, 18.4-1	-	
193			Include information such as, if the Project lies on Crown land, an Indian Reservation or the Agricultural Land Reserve	-	Chapter 18.4.1 (Table 18.4-1), 18.4.3.1 to 18.4.3.14 Chapter 22.1	-	
194			A description of zoning, fee simple, recreation and tourism uses, and other land use designations as applicable.	-	Chapter 18.1.1	-	
195			It will also include relevant information pertaining to land tenures, licences, permits or other authorizations that would potentially affect the Project.	-	Chapter 18.4.3.1 to 18.4.3.14	-	
196			It will also cover any identified reports on the status of consultations with holders of such tenures and permits.	Appendix 3-K, 3-L	Chapter 3.7	-	
197			Land and Resource Management Plans that the Project overlaps will be identified.	-	Chapter 18.2, Chapter 18.4.3.1 (Table 18.4-3) Chapter 22.2	-	
198			The management objectives of the Land and Resource Management Plans will be listed.	-	Chapter 18.4.3.1 (Table 18.4-3), 18.4.3.9 Chapter 22.2 (Table 22.2-1)	-	
199			The existing and proposed management and monitoring programs or regional studies will be disclosed	-	Chapter 18.3.1.3 (Table 18.3-1), 18.4.1 Chapter 22.3.2.2	-	
200			Other identified developments or foreseeable future developments will be mentioned in this section even if not directly related to the Project.	-	Chapter 18.6.1.3, 18.6.2 (Table 18.6-1)	-	
201	2.6.1	Estimated Capital Construction Costs	Detailed company financial information will not be included in the Application; however, it will discuss the initial capital construction cost estimates for the Project.	-	Chapter 1.9.1 Chapter 5.14	-	
202			It will include, as appropriate, a breakdown of costs for the land, buildings and equipment associated with the Project.	-	Chapter 1.9.1 (Table 1.9-2) Chapter 5.14	-	

	AIR	AIR Section Number and			Location of Relevant Informati	ion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
203			It will indicate the potential for use of local facilities and indicate if these are currently under-utilized.	-	Chapter 1.9.1 Chapter 5.14	-	
204	2.6.2	Estimated Operating Costs	In this section of the Application the estimated operating costs over the life of the Project (for land, buildings and equipment) will also be disclosed.	-	Chapter 1.9.2 (Table 1.9-3)  Chapter 5.14	-	
205			Discuss the estimated annual operating costs (excluding labour).	-	Chapter 1.9.2 Chapter 5.14	-	
206			Indicate how the costs are measured.	-	Chapter 5.14	-	
207			Indicate the costs for decommissioning/ closure/abandonment/reclamation.	-	Chapter 1.9.2 Chapter 7.11	-	
208	2.6.3	Estimated Employment Opportunities	Employment estimates will also be discussed including direct employment to be created (stated in number of person years (PY)) by major job categories such as general labour, skilled labour, management /supervisors, and business services, during construction and operation, distinguishing among full-time, part-time and seasonal workers.	Appendix 1-A	Chapter 1.9.3.2 , 1.9.3.3	-	
209			Estimated wage levels and total number of people hired locally, provincially, nationally and/or internationally by major job category for the construction and operating periods will also be included.	Appendix 1-A	Chapter 1.9.3.2, 1.9.3.3	-	
210			This section of the Application will also outline YMI's anticipated hiring strategy, which will make provisions for the use of talented local human resources currently underutilized.		Chapter 1.9.3.1	-	
211			It will also include a summary of projected indirect employment opportunities that will likely occur as a result of the construction and operation phases of the Project.	Appendix 1-A	Chapter 1.9.4, 1.9.5	-	
212			Assumptions relating to industry specific multipliers or other multipliers used will also be included.	Appendix 1-A	Chapter 1.9	-	
213	2.6.4	Annual Government Revenues – Construction & Operation Phases	The Application will also estimate the projected benefits to contractor supply services	-	Chapter 1.9.3.2, 1.9.3.3	-	
214			List the major types of businesses/contractors, broken down at the local, provincial, and national levels.	-	Chapter 1.9.4.2, 1.9.4.3	-	
215			The value of supply of service contracts expected for both the construction and operation phases of the Project and information about a local purchasing strategy will also be included.	-	Chapter 1.9.4.1	-	
216			The anticipated annual revenues from various taxes, leases, licences, royalties, tenures, etc., for all levels of government during the construction and operation phases of the Project will be discussed in this section of the Application as well.	-	Chapter 1.9.4.2, 1.9.4.3	-	
217	2.6.5	Project Contribution to Community Development	Information sources to assist in the evaluation of predicted Project contributions to community development will be covered under this section and include BC Stats and Statistics Canada (e.g., quarterly regional statistics, labour force data, community profiles, etc.) Other local information sources will also be used as appropriate.	Appendix 1-A 17-A	Chapter 1.9.5 Chapter 17.4.3	-	

HARPER CREEK MINING CORPORATION

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
218	2.7	Applicable Permits	This section will include a list of all applicable provincial and federal licences, permits, and/or approvals required for the construction, operation and decommissioning of the Project and the associated responsible regulatory agencies.	-	Chapter 2.4.1, 2.4.2 (Table 2.4-1, 2.4-2)	-	
219			It will also indicate if a request for concurrent permitting is being requested under the Act pursuant to the Concurrent Approval Regulation (BC Reg. 371/2002).	-	Chapter 2.1.4 Chapter 2.4.1	-	
220	3	Assessment Process	This section of the Application will describe the information distribution and consultation activities such as open houses and meetings with interested parties.		Chapter 2.3.2 to 2.3.4 Chapter 3.7.3	-	
221			It will also summarize and describe direct communications (i.e., letters, phone calls, faxes and emails) undertaken prior to and during the Pre-Application stage.		Chapter 3.7.1.2	-	
222			Describe those activities planned during and subsequent to the Application review process.		Chapter 3.5.3, 3.6.3, 3.7.3	-	
223			This chapter will also document consultations with federal, provincial, and local government agencies and regulatory authorities, as well as key stakeholders (e.g., land and resource tenure holders in the proposed Project Area).	Appendices 3-E, 3-G, 3-H, 3-I, 3-J, 3-K, 3-L	Chapter 3.2 to 3.7	-	
224			It will highlight issues and concerns raised during consultation activities and identify where in the Application they have been addressed.		Chapter 3.1.1, 3.5.2, 3.6.2, 3.7.2 Chapter 23.5.6	-	
225	3.1	Provincial EA Process	The Application will detail consultation activities completed between provincial government agencies and the YMI team. Provincial agencies contacted to date include:	Appendix 3-I (Table 3-I1)	Chapter 2.3.2 Chapter 3.6	-	
226			Ministry of Health		Chapter 3.3 (Table 3.3-1)	-	
227			Ministry of Transportation and Infrastructure		Chapter 3.3 (Table 3.3-1)	-	
228			Ministry of Energy and Mines		Chapter 3.3 (Table 3.3-1)	-	
229			Ministry of Forests, Lands, and Natural Resource Operations, and		Chapter 3.3 (Table 3.3-1)	-	
230			Ministry of Environment:		Chapter 3.3 (Table 3.3-1)	-	
231			o Environmental Assessment Office, and		Chapter 3.3 (Table 3.3-1)	-	
232			o Environmental Protection Division.		Chapter 3.3 (Table 3.3-1)	-	
233			The Application will detail the purpose and methods of consultation with provincial governments, issues raised by governments and how YMI addressed or proposes to address these issues.		Chapter 3.3 Chapter 3.6.1 to 3.6.3	-	
234			This section will also have a list of milestones that will include issuance of Section 10 and 11 Orders, working group meeting and public comment periods.		Chapter 2.3.2.3 (Table 2.3-2)	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
235			All issues and concerns will be tracked in an "issues tracking table" that will document concerns and the degree to which the issues are considered resolved by YMI and other involved parties during the preparation for the AIR and the Application. It is expected that separate issues tables will be developed for each of the following groups (as needed): First Nations, local communities, provincial and federal government agencies, and other stakeholders.	Appendix 3-F Appendix 3-J Appendix 3-L	Chapter 3.3	-	
236	3.2	Federal Review	This section of the Application will detail pre-application consultation completed between federal government agencies and YMI. Preliminary meetings and discussions have already taken place. Federal agencies involved to date include:	Appendix 3-I (Table 3-I2)	Chapter 2.3.3 Chapter 3.6	-	
237			Canadian Environmental Assessment Agency		Chapter 2.3.3	-	
					Chapter 3.3, 3.6.1		
238			Major Projects Management Office		Chapter 2.3.3	-	
					Chapter 3.3, 3.6.1		
239			Fisheries and Oceans Canada		Chapter 2.3.3	-	
					Chapter 3.3, 3.6.1		
240			Transport Canada		Chapter 2.3.3	-	
					Chapter 3.3, 3.6.1		
241			Health Canada		Chapter 2.3.3	-	
					Chapter 3.3, 3.6.1		
242			Environment Canada, and		Chapter 2.3.3	-	
					Chapter 3.3, 3.6.1		
243			Natural Resources Canada.		Chapter 2.3.3	-	
					Chapter 3.3, 3.6.1		
244			The Application will detail the purpose and methods of consultation with federal governments, issues raised by governments, and how YMI addressed or proposes to address these issues.	Appendix 3-I, 3-J	Chapter 3.6.2, 3.6.3	-	
245			A tracking table detailing issues and concerns raised during the preparation of the AIR and Application will be included in this section.	Appendix 3-J	Chapter 3.6.2	-	
246			A list of applicable federal milestones will also be included in this section.		Chapter 2.3.3.1 (Table 2.3-3)	-	
247	3.3	First Nations Consultation	The Application will clearly identify the First Nations potentially affected by the Project.		Chapter 3.2.4 Chapter 23.5.2	-	
248			The Application will detail pre-application consultation activities carried out between local First Nations and YMI.	Appendices 3-E, 3-F	Chapter 3.5.1 Chapter 23.4.2	-	
249			A record of consultation activities will be included in the Application.		Chapter 3.5.1.1, 3.5.1.2, 3.5.1.6 to 3.5.1.8 Chapter 28.3	-	

	AIR	AIR Section Number and			Location of Relevant Informat	ion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
250			An outline of the purpose and methods of First Nations' consultations, specific issues raised by First Nations, and how YMI addressed or proposes to address these issues will be included.	Appendix 3-E (Table 3-E1 to 3-E6); Appendix 3-F (Table 3-F1 to 3-F5)	Chapter 3.5.1 Chapter 3.5.2	-	
251			A tracking table detailing issues and concerns raised by First Nations during the preparation of the AIR and Application will be included.	Appendix 3-F (Table 3-F1), 3-G, 3-H	Chapter 3.5.1.9	-	
252			Substantial detail regarding engagement, consultation and other information pertaining to those First Nations that may potentially be impacted by the Project will be described in PART C - FIRST NATIONS INFORMATION REQUIREMENTS.	Appendices 3-E, 3-F, 3-G, 3-H	Chapter 3.5 Chapter 23.4	-	
253	3.4	Public And Agency Information Distribution And Consultation	The Application will summarize YMI's past and proposed public and agency consultation initiatives, in accordance with the consultation provisions set out in the Section 11 order issued by the EAO.  This section will include the following:	-	Chapter 3.7	-	
254			<ul> <li>A summary of consultations with public and other key stakeholders as well as provincial, federal and local government agencies</li> </ul>	Appendix 3-I Appendix 3-K	Chapter 3.6.1 Chapter 3.7.1	-	
255			<ul> <li>A description of the methods and approaches for information distribution and consultation used at public meetings/open houses, one-on-one meetings with interested parties, media articles, enclosures and community newspapers, or through interviews on local radio and television, and by means of participation in community events, and</li> </ul>		Chapter 3.7.1.1 to 3.7.1.8	-	
256			<ul> <li>A summary of issues, concerns, and interests identified during consultation activities and how these matters were addressed, where possible cross-referencing relevant sections of the Application.</li> </ul>	Appendix 3-J Appendix 3-L	Chapter 3.7.2 Chapter 3.7.3	-	
257	3.4.1	Pre-Application Consultation	This sub-section will include an outline of consultations undertaken in the pre-Application stage of the EA, and will cover both the preparation of the AIR and the Application. Specific summaries will be included for:			-	
258			Consultations with public and other key stakeholders.	Appendix 3-K Appendix 3-L	Chapter 3.7.1.2, 3.7.1.5	-	
259			The purpose and methods of consultation with local communities and stakeholders, issues identified, and how YMI or other appropriate parties have addressed or proposes to address these issues will be included in this part of the Application.	Appendix 3-L	Chapter 3.7.1.1 to 3.7.1.8,	-	
260			<ul> <li>Consultations with federal, provincial, and local government representatives – Initial meetings and discussions have taken place with various provincial and federal regulators. In addition, informal meetings have taken place between YMI representatives and selected local government contacts.</li> </ul>	Appendix 3-I	Chapter 3.6.1	-	

	AIR	AIR Section Number and			Location of Relevant Informati	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
261			<ul> <li>The Application will include a summary of responses regarding issues raised by government agencies as well as summaries of discussions indicating how issues were resolved or addressed by YMI and other relevant parties.</li> </ul>	Appendix 3-J	Chapter 3.6.2, 3.6.3	-	
262	3.4.2	Consultation Planned during Application Review	This section of the Application will describe the public consultation program proposed for the Application review stage of the EA process.		Chapter 3.5.3, 3.6.3, 3.7.3	-	
263			It will describe the proposed methods and plans for consultation with government agencies and the process used to resolve outstanding issues.		Chapter 3.6.3	-	
264			This part of the Application will provide a thorough assessment of potential environmental, social, economic, heritage, and health effects as a result of construction, operation/maintenance, and decommissioning of the proposed Project. It will include a description of recommended mitigation measures to reduce or eliminate potential effects and will also include an assessment of potential cumulative impacts, residual effects and their significance, following the implementation of applicable mitigation measures.	-	Chapter 9 to 21 Sections X.5 to X.6	-	
265			The residual effects identified will form the basis for the federal cumulative environmental effects assessment in Part D of the Application. Each discipline-specific study that will form Part B of the Application will also meet federal requirements for the assessment of environmental effects, environmental changes, and species at risk.	-	Chapter 9 to 11, 15 to 17, 20 to 21 Chapter 27	-	
266	4.1	Introduction	The Application will provide a clear description of the assessment methodology used for the EA, and specifically the following:	-	Chapter 8	-	
267			The scope of the EA	-	Chapter 8.2, 8.4	-	
268			A list of the agencies, First Nations, and stakeholders that reviewed and commented on the AIR	-	Chapter 3.2.3, 3.3, 3.5.1.3	-	
269			A list of the guidance documents provided by agencies used to develop the assessment methodology	-	Chapter 8.4.1.2 Chapter 8.7	-	
270			<ul> <li>A list of all valued components considered in the EA (a preliminary list is provided in the AIR for purposes of discussion with provincial and federal EA leads and the Working Group)</li> </ul>	-	Chapter 8.4.1.3 (Table 8.4-2)	-	
271			<ul> <li>Methods used for assessing potential effects of the Project, including the evaluation of the significance of effects (magnitude, geographic extent, duration and frequency, reversibility, context and probability) for construction, operation and decommissioning phases of the Project</li> </ul>	-	Chapter 8.6.1 to 8.6.7	-	
272			The mitigation measures developed to avoid or reduce adverse effects	-	Chapter 8.6.2	-	

	AIR	AIR Section Number and		Lo	cation of Relevant Inform	ation	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
273			Baseline studies and assessment analysis, describe each standard used	Appendix5-B	6.3; 6.4	-	
			(e.g. provincial Resource Information Standards Committee), and	5-C	7.2; 7.3		
				6-A	9.4.2.2		
				9-A; 9-B; 9-C; 9-	10.2; 10.4		
				D; 9-E	11.4.2.3		
				10-A	12.2; 12.4		
				11-A; 11-B	13.2; 13.4		
				12-A; 12-B	14.2; 14.4		
				13-A; 13-C	15.2; 15.4;		
				14-A; 14-C; 14-D	16.2; 16.4		
				15-A	17.2; 17.4		
				16-B	18.2; 18.4		
				19-A	19.2; 19.4		
				20-A; 20-B; 20-D	20.2; 20.4		
				21-A	21.2; 21.4		
					22.3		
274			A list of applicable provincially/regionally developed Best	-	6.5	Section 24.2.2.1,	
			Management Practices (BMPs) and guidance documents that will be		10.5.3	24.5.3, 24.6.2	
			implemented.		11.5.2		
					12.5.2		
					13.5.3		
					14.5.2		
					15.5.2		
					16.5.2		
					17.5.3		
					18.5.2		
					19.5.7		
					20.5.2		
					21.5.2		
					22.4.3		
					24		

	AIR	AIR Section Number and			Location of Relevant Informati	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
275	4.2	Valued Components	This section of the Application will describe the methodology and criteria used to identify Valued Components (VCs). Proposed VCs are listed in Table 4.1: air quality and climate geochemistry, hydrogeology (groundwater quality), surface water quality, hydrology (surface water quantity), fish (bull trout and rainbow trout), fish habitat (aquatic invertebrates), rare plants, rare and sensitive ecological communities (rare plant communities, wetlands, old-growth forest, rock outcrops), terrestrial invertebrates (butterflies and dragonflies), amphibians (western toad), migratory birds (barn swallow, common nighthawk, great blue heron, olive-sided flycatcher, raptors (northern goshawk, bald eagle), bats (northern myotis), large mammals (mule deer, wolverine, grizzly bear, mountain caribou, and moose), employment and income, business opportunities, revenue and taxes, community growth, community health and well-being, water use (navigation, water licenses, recreation), visual quality, traffic, heritage objects, heritage sites, air quality, country foods, drinking water, noise and vibration, and occupational health and safety.	-	Chapter 8.4.1.2 to 8.4.1.3 (Table 8.4-2)	-	VC Fish (Bull Trout, Coho Salmon, and Rainbow Trout) selection is described in Chapter 14, Section 14.3.1.
276	4.3	Spatial Boundaries	The Application will describe the spatial boundaries used to define baseline study areas and the geographic scope of the effects assessment.	-	Chapter 8.4.2.2	-	
277	4.4	Temporal Boundaries	The Application will provide an explanation for the temporal boundaries used in the assessment relative to the VCs for the life of the Project.	-	Chapter 8.4.2.1	-	
278			Detail the anticipated effects for the various phases of the Project such as pre-construction, construction, operation, decommissioning, closure, and post-closure.	-	Chapter 8.4.2.1 (Table 8.4-3) 6.1.1 9.5.1 10.5.1 11.5.1 12.5.1 13.5.1 14.5.1 15.5.1 16.5.1 17.5.1 18.5.1 19.5.1 20.5.1 21.5.1 22.4.1 Executive Summary Chapter 28 Table 28.4-1		

	AIR	AIR Section Number and			Location of Relevant Informati	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
279			Annual and/or seasonal variations related to VCs and biophysical	-	6.1.1	-	
			constraints for all phases will also be included and cover topics such as		8.4.2.1		
			freeze/thaw cycles, migration patterns, breeding patterns, etc.		9.3.1		
					10.3.1		
					11.3.1		
					12.3.1		
					13.3.1		
					14.3.1		
					15.3.1		
					16.3.1		
					17.3.1		
					18.3.1		
					19.3.1		
					20.3.1		
					21.3.1		
					22.3.1		
280	4.5	Assessment of Potential	This section of the Application will describe the assessment methodology	-	Chapter 8.6	-	
		Significant Adverse Effects	used to determine if the Project will have significant adverse				
		Methodology	environmental, social, economic, heritage and health effects, and will reflect the mitigation measures proposed in the Application.				
281			It will also summarize the assessment methodology for each VC identified	_	Chapter 8		
			presented. This section will also cover the following:	-	Спариет в		
282			Relevant background information.	-	Chapter 8.5.1 to 8.5.3	-	
283			Potential impacts, both direct and cumulative of the Project.	-	Chapter 8.6.1, 8.6.3	-	
284			Identification of cumulative impacts for VCs, where applicable.	-	Chapter 8.7	-	
285			<ul> <li>Identification of proposed mitigation measures including those</li> </ul>	-	Chapter 8.6.2	-	
			considered in the design of the Project and those developed through		6.5		
			the EA such as additional measures, works, processes or features that are not part of the basic features of the Project and are added		10.5.3		
			specifically to mitigate the potential impact.		11.5.2		
					12.5.2		
					13.5.3		
					14.5.2		
					15.5.2		
					16.5.2		
					17.5.3		
					18.5.2 19.5.7		
					20.5.2		
					21.5.2		
					22.4.3		
					24		
					Section 28.5.3		
					JCCHOIT 20.3.3		

	AIR	AIR Section Number and			Location of Relevant Informat	ion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
286			<ul> <li>An assessment to determine if there are any significant residual adverse effects after mitigation efforts have been completed. This would be done by analyzing the following factors:</li> </ul>	-	-	-	
287			o Magnitude.	-	Chapter 8.6.3, 8.6.5, 8.6.7	-	
288			o Geographic Extent.	-	Chapter 8.6.3, 8.6.5, 8.6.7	-	
289			o Duration and Frequency.	-	Chapter 8.6.3, 8.6.5, 8.6.7	-	
290			o Reversibility.	-	Chapter 8.6.3, 8.6.5, 8.6.7	-	
291			o Context.	-	Chapter 8.6.3, 8.6.5, 8.6.7	-	
292			o Probability.	-	Chapter 8.6.3, 8.6.5, 8.6.7	-	
293			The means by which the above factors are used to determine the overall significance of residual effects will be clearly described in the Application. The methodology used to assess environmental effects and determine significance will consider FEARO (1994a) and other relevant guidance documents (i.e. Hegmann et al. 1999) available through the CEA Agency website.	-	Chapter 8.2, 8.7	-	
294			The Application will also outline and describe components of the Project's impact assessment that have taken place in parallel with the engineering design for the facilities.	Appendices 11- B, 12-B, 13-C, 14- E	Chapter 8.6.1 to 8.6.3 Chapter 5 Chapter 12 Chapter 13 Chapter 14	-	
295	4.6	Cumulative Effects Assessment	This section of the Application will explain the methodology and rationale used to identify other developments, including past and present projects, and reasonably foreseeable future developments.	-	Chapter 8.7.1.2, 8.7.1.3 (Figure 8.7-1)	-	
296			It will consider these developments in combination with the potential effects of the Project to assess the potential for cumulative and residual environmental effects that may result from the proposed Project. The CEA will be in accordance with the following guidelines and standards:	-	Chapter 8.7	-	
297			Cumulative Effects Practitioners Guide (Hegmann et al. 1999)	-	Chapter 8.7 (all sections)	-	
298			A Reference Guide for the Canadian Environmental Assessment Act Addressing Cumulative Environmental Effects (FEARO 1994b), and	-	Chapter 8.7 (all sections)	-	
299			<ul> <li>Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act. Operational Policy Statement (CEA Agency 2007).</li> </ul>	-	Chapter 8.7 (all sections)	-	
300			The Application will identify potential limitations and associated uncertainty of the CEA assessment.	-	Chapters 9.6.6 10.6.6 15.6.6 16.8.6 17.6.6 22.5.6	-	

	AIR	AIR Section Number and			Location of Relevant Informa	tion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
301			This section of the Application will also discuss the predicted effectiveness	-	Chapter 8.7.3	-	
			of proposed mitigation strategies and will suggest if additional monitoring		Chapter 9.6.3		
			is warranted.		Chapter 10.6.3		
					Chapter 11.6.3		
					Chapter 15.6.3		
					Chapter 16.8.3		
					Chapter 17.6.3		
					Chapter 20.6.3		
					Chapter 22.5.3		
302	5.1	Environmental Background	The Application will provide a general description of the biophysical environment and surrounding areas within the zone of potential influence. The biophysical environment includes but is not limited to the following:		-	-	
303			Atmospheric environment (e.g. climate, air quality)	Appendices 9-A,	Chapter 9 and 10	_	
				9-B, 10-A	Sections X.4.1 to X.4.2		
304			Geophysical environment (e.g. geochemistry, groundwater)	Appendices 6-A	Chapter 6 and 11	-	
001			Geophysical environment (e.g., geochemistry) groundwater)	and 11-A	Sections X.4.1 to X.4.3		
305			Aquatic environment (e.g. hydrology, surface water quality, fisheries	Appendices			
303			and aquatic life), and	12-A, 13-A, 14-A	Chapter 12 to 14 Sections X.4.1 to X.4.3	-	
				to 14-C	Sections A.4.1 to A.4.3		
306			Terrestrial environment (e.g. wetlands, birds, wildlife).	Appendix 15-A	Chapter 15 and 16	-	
					Sections X.4.1 to X.4.3		
307			Each assessment pertaining to a Valued Environmental Component	-	Chapter 6.1.1	-	
			detailed in this chapter will include an introduction, rationale for selection,		Chapter 8.4.2.1		
			a description of sampling/assessment methodologies, a summary of		Chapter 9.3.1		
			baseline conditions, and a reference section.		Chapter 10.3.1		
					Chapter 11.3.1		
					Chapter 12.3.1		
					Chapter 13.3.1		
					Chapter 14.3.1		
					Chapter 15.3.1		
					Chapter 16.3.1		
					Chapter 17.3.1		
					Chapter 18.3.1		
					Chapter 19.3.1		
					Chapter 20.3.1		
					Chapter 21.3.1		
					Chapter 22.3.1		

	A ID	AIR Section Number and			Location of Relevant Informat	ion	
ID#	AIR Section	AIR Section Number and Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
308			Each Valued Environmental Component will also include a section that discusses potential effects and recommended mitigation measures, follow-up programs, potential residual effects, and their significance.	-	Chapters 9 to 22 Section X.5 Chapter 24 Chapter 28.4, 28.5 Table 28.4-1	-	
309			If CEAA is triggered, each component will also summarize key indicators, influence of consultation on issues scoping and assessment (where applicable), and cumulative effects of past, present, or future projects.	-	Chapter 9 to 11, 15 to 16 Sections X.6.1 to X.6.5 Chapter 21.6.1, 21.6.2	-	
310	5.2.1	Introduction	This sub-section will provide an introduction and background to the climate and air quality assessment based on a literature review of existing information.	-	Chapter 9.1, 9.4	-	
311			It will provide the rationale for the selection of climate and air quality as a Project specific VEC in consideration of potential issues related to potential interactions with Project infrastructure and activities.	-	Chapter 9.3.1	-	
312			It will also describe and/or map the physical (spatial) boundaries and timeframes (temporal) of the Study Area from which potential effects of construction, operations, and decommissioning phases of the proposed Project are anticipated to occur.	-	Chapter 9.3.2	-	
313	5.2.2	Climate	This subsection will provide the rationale for the selection of this component as a VC and an introduction and background to the local and regional climate.		Chapter 9.3, 9.4	-	
314			The Application will summarize historic data from Environment Canada (EC) climate stations at Vavenby and Axel Creek (others stations may also be considered as appropriate).	Appendix 9-B	Chapter 9.4.1, 9.4.2	-	
315			It will also discuss the results obtained from a climate station established by YMI in late 2007 near the vicinity of the proposed tailings facility and pit area. Data collected from the on-site climate station includes:	Appendix 9-B	-	-	
316			Temperature	Appendix 9-B	Chapter 9.4.2.1	-	
317			Rainfall	Appendix 9-B	Chapter 9.4.2.1	-	
318			Wind speed and direction	Appendix 9-B	Chapter 9.4.2.1	-	
319			Barometric pressure	Appendix 9-B	Chapter 9.4.2.1	-	
320			Relative humidity, and	Appendix 9-B	Chapter 9.4.2.1	-	
321			Solar radiation.	Appendix 9-B	Chapter 9.4.2.1	-	
322			Results from site-specific snow surveys conducted in 2008 and 2011 within the Project area will also be discussed in this section of the Application.	Appendix 5-D (Section 3.2.4 and Table 3.1), 9-B (Section 4.6), 12-B, 12-D	Chapter 12.4.2.2	-	
323	5.2.3	Air Quality	This sub-section will provide local and regional air quality information and the rationale, methodology, and results of an air quality assessment.		Chapter 9	-	
324			It will provide the rationale for the selection of air quality as a Project specific VC.	-	Chapter 9.3.1 (Table 9.3-1)	-	

	AIR	AIR Section Number and			Location of Relevant Informat	ion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
325			This section will discuss potential contaminants such as particulate matter, dust, VOCs, and reduced sulphur, and will also address some treatment equipment.	Appendix 9-A	Chapter 9.1, 9.3.1, 9.5.3 Table 9.5-13	-	
326	5.2.4	Assessment of Potential Effects and Proposed Mitigation	The Application will identify and evaluate potential effects of the proposed Project on maintaining air quality and climate conditions that are consistent with both provincial and federal standards and quality- of-life related issues.	-	Chapter 9.5.1 to 9.5.3 (Table 9.5-13)	-	
327	5.2.5	Potential Residual Effects and their Significance	This sub-section will identify potential residual effects of the proposed Project on air quality and climate conditions after appropriate mitigation measures and environmental management strategies have been applied.	-	Chapter 9.5.4 Chapter 27.2.1	-	
328			The overall significance of residual effects will be discussed and placed into context based on an assessment of predicted magnitude, geographic extent, duration/frequency, reversibility, context, and probability (see Section 4.5 for details on these assessment criteria).	-	Chapter 9.5.6	-	
329	5.3.1	Introduction	This sub-section will provide an introduction and background to the assessment of site geochemistry based on a literature review of existing information.		Chapter 6.3.1.3	-	
330			It will provide the rationale for the selection of this component as a Project specific VEC in consideration of potential issues related to potential interactions with Project infrastructure and activities.	Appendix 6-A	Chapter 6.1.1, 6.1.2	-	
331			It will also describe and/or map the physical (spatial) boundaries and timeframes (temporal) of the Study Area from which potential effects of construction, operations, and decommissioning phases of the proposed Project are anticipated to occur.	-	Chapter 8.4.2	-	
332	5.3.2	Baseline Conditions	The Application will describe the geochemistry of the Project area.		Chapter 6.3	-	
333			Provide a detailed description of the metal leaching (ML) and acid rock drainage (ARD) characteristics of the Harper Creek deposit.	Appendix 6-A	Chapter 6.3	-	
334			The acid generating potential	Appendix 6-A	Chapter 6.3.3.2	-	
335			The neutralizing potential	Appendix 6-A	Chapter 6.3.3.1	-	
336			• The elemental reservoir within materials that are potentially available for leaching	Appendix 6-A	Chapter 6.3.3.1	-	
337			Short term elemental loading rates to the downstream environment	Appendix 13-A	Chapter 6.3.3.1	-	
338			Mineralogy	Appendix 6-A	Chapter 6.3.3.1	-	
339			Assessment of the lag time to onset of ARD or significant metal leaching for all mine materials, if rocks are determined to be potentially acid generating (PAG) or metal leaching	Appendix 13-C3 (Section 3.9)	Chapter 6.6 Chapter 13.5.4	-	
340			Delineation of geochemical source terms and describe methods used in geochemical modelling, and	Appendix 6-A	Chapter 6.4.1, 6.4.2	-	
341			Long term elemental loading rates to the downstream environment.	Appendix 13-A	Chapter 6.4.1, 6.4.2	-	
342			An assessment of lag time to the onset of ARD or significant leaching from other mine materials and surfaces will be completed, and the results will be used to assist in the development of management plans.	Appendix 13-C3 (Section 3.9)	Chapter 6.6 Chapter 13.5.4	-	

	AIR	AIR Section Number and			Location of Relevant Informat	ion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
343			<ul> <li>The geochemical characterization and prediction program will be developed from direction provided by provincial and federal agency staff and in accordance with the policy and guideline documents listed below:</li> </ul>		Chapter 6.1	-	
344			<ul> <li>Policy for Metal Leaching and Acid Rock Drainage at Minesites in British Columbia (MEM and MELP 1998)</li> </ul>	Appendix 6-A	Chapter 6.2	-	
345			<ul> <li>Guidelines for Metal Leaching and Acid Rock Drainage at Minesites in British Columbia (Price and Errington 1998), and</li> </ul>	Appendix 6-A	Chapter 6.2	-	
346			DRAFT Water and Air Resource Protection Guidelines for Mine Proponents and Operators – Baseline Monitoring (MOE 2011).	Appendix 6-A	Chapter 6.2	-	
347	5.3.3	Assessment of Potential Effects and Proposed Mitigation	A mitigation and environmental management program will be developed following the policy and guideline documents listed in Section 5.3.2.	-	Chapter 6.5	Section 24.9	
348			The Application will identify and evaluate potential effects resulting from the interaction between the proposed Project and ML and ARD potential.	-	NA	-	Not applicable, as geochemistry has been scoped out as a VC
349			The team will apply the results of the geochemical testing and the geochemical model simulations to characterize the ML/ARD potential of waste rock, tailings, ore and low grade ore, final open pit characteristics, and borrow materials.	Appendix 6-A	Chapter 6.3.3.1 to 6.3.3.4	-	
350			The results of the ML/ARD characterization will be applied to optimize the mine plan to identify volumes of Potentially Acid Generating (PAG) and non-PAG material, mine sequencing of PAG and non-PAG material, and segregation/disposal methods for PAG and non-PAG materials.	Appendix 6-A	Chapter 6.3.3, 6.5	Section 24.9	
351			If the potential ML/ARD issues are identified, an appropriate mitigation and environmental management program will be developed.	-	Chapter 6.5	Section 24.9	
352			The plan will detail prevention/management strategies to address potential environmental impacts of the waste rock, ore stockpiles, low grade ore, and the open pit.	-	Chapter 6.5	Section 24.9	
353			<ul> <li>Provide details of any waste rock segregation plans (segregation of PAG and non-PAG waste materials)</li> </ul>	-	Chapter 6.5	Section 24.9	
354			<ul> <li>Provide details of any potential engineering approaches (engineered covers, storage facilities, drainage collection, and treatment systems, etc.), and</li> </ul>	-	Chapter 6.5	Section 24.9	
355			<ul> <li>Identify monitoring and maintenance requirements for proposed mitigation strategies.</li> </ul>	-	Chapter 6.5	Section 24.9	
356			If waste rock segregation is proposed, the Application will demonstrate the feasibility to successfully segregate PAG and non-PAG mine waste materials during operations, propose geochemical segregation criteria and identify operational methods to achieve geochemical characterization and segregation during operations (i.e. geochemical surrogates, on site lab, procedures needed, etc.).	-	-	Section 24.9	
357			The Application will include a sensitivity analysis to assess the effects of imperfect segregation of waste rock.	Appendix 6-A (Page 37).	Chapter 6.5	Section 24.9	

	AIR	AIR Section Number and		I	Location of Relevant Informat	tion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
358			If a water cover is proposed as part of the segregation plan, information will be provided to identify the types, volumes, and geochemistry of mine waste to be flooded, the lag time to onset of ML/ARD in mine waste to be flooded, the disposal methods and location, the time until full flooding will occur, information to demonstrate that mine wastes will remain flooded during extreme climatic events, measures to mitigate soluble contaminants that could affect water quality, an assessment of geochemical stability under flooded conditions, and monitoring and maintenance requirements to ensure geochemical and physical security of flooded mine wastes (refer also to ML/ARD guidelines).	Appendix 5-D (Section 5.1 to 5.4) Appendix 6-A (Section 5)	Chapter 5.1 to 5.4, 6.6- 6.5 13.5.2.3 13.5.3.3	Section 24.9.3.1	
359			If engineered cover systems are proposed as a ML/ARD mitigation plan for the Project, a conceptual design will be provided including the design objectives and principles, the characteristics and volumes of cover materials required, construction methods, assessment of expected performance and long-term effectiveness under the expected range of climatic conditions, monitoring and maintenance requirements, contingency plans, costs of constructing and long-term monitoring and maintenance (refer also to ML/ARD guidelines).	-	-	Section 24.9	
360			If drainage collection and treatment is proposed as a mitigation strategy for the Project, a conceptual design will be provided including location, characterization of influent and effluent chemistry and flow, demonstration of the effectiveness of the drainage collection and holding system, conceptual design information on the treatment process, predicted reagent use, assessed performance under the expected range of flow and climatic conditions, sludge disposal plan, the operating, monitoring and maintenance requirements to ensure successful treatment is sufficient to achieve long-term environmental protection requirements, and anticipated capital and operating costs (refer also to ML/ARD guidelines).	-	-	Section 24.9	
361	5.3.4	Potential Residual Effects and their Significance	This sub-section will identify potential residual effects of the proposed Project with regards to site geochemistry after appropriate mitigation measures and environmental management strategies have been applied.	-	NA	-	Not applicable, as geochemistry has been scoped out as a VC
362			The overall significance of residual effects will be discussed and placed into context based on an assessment of predicted magnitude, geographic extent, duration/frequency, reversibility, context, and probability (see Section 4.5 for details on these assessment criteria).	-	NA	-	Not applicable, as geochemistry has been scoped out as a VC
363	5.4.1	Introduction	This sub-section will provide an introduction and background to the assessment of the site hydrogeology based on a literature review of existing information.	-	Chapter 11.1, 11.4 References	-	
364			It will provide the rationale for the selection of this component as a Project specific VEC in consideration of potential issues related to potential interactions with Project infrastructure and activities.	-	Chapter 11.3.1	-	
365			It will also describe and/or map the physical (spatial) boundaries and timeframes (temporal) of the Study Area from which potential effects of construction, operations, and decommissioning phases of the proposed Project are anticipated to occur.	Appendix 11-A (Section 4.2) Appendix 12-B	Chapter 11.3.2	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
366	5.4.2	Baseline Conditions	This section of the Application will detail the groundwater monitoring program implemented to obtain a baseline understanding of the Project footprint and surrounding area and will include:		Chapter 11.4.1	-	
367			Current groundwater use in the area	Appendix 11-A	Chapter 11.4.1.5	-	
368			Published geology and hydrogeology reports	Appendix 11-A	Chapter 11.4.1.4	-	
369			Surficial geology, geology and watershed maps	Appendix 11-A (Section 1.5.4 Appendix 12-A (Figure 1.2)	Updated Chapter 11: Section 11.3.2.2 (Figure 11.3-1); Section 11.4.1.4 (Figures 11.4-7; 11.4-8); Sections 11.4.2.3 and 11.4.3.2 (Figures 11.3-12, 11.4-14); Section 11.4.3.3 (Figures 11.4-17 to 11.4-20)	-	
370			Aerial photography	Appendix 11-A Appendix 12-A Appendices 5-A, 5-B, 5-C,5-E Appendices 7-A and 7-B Appendix 9-B Appendix 10-A Appendices 14-A to 14 - C Appendix 19-A Appendix 20-A	Chapter 11.4.1	-	
371			Climate data	Appendix 11-A	Chapter 11.4.1.2	-	
372			Exploration drill holes and test pits	Appendix 11-B Updated Appendix 11-A: Section 1.5.4.3	Updated Chapter 11: Section 11.4.1.4	-	
373			Hydrometeorology	Appendix 11-A	Chapter 11.4.3.2 Chapter 12	-	
374			Based on the available data, a conceptual model will be prepared and will be modified, as additional information becomes available	Appendix 11-A (Section 4.3, sub- Appendix D-3) Appendix 11-B, 11-C	Chapter 11.4.3.3	-	
375			<ul> <li>A watershed model will be prepared to simulate monthly stream flows in the areas of the proposed mine. It will use climate records, streamflow records and the conceptual groundwater model to develop monthly streamflows over a period of record. The model will include groundwater recharge, groundwater storage and groundwater discharge. The watershed model will include an evaluation of the precipitation, snow melt, evapotranspiration, infiltration and runoff conditions</li> </ul>	Appendix 12-B	Chapter 11.4.3.3 Chapter 12.4.2.2, 12.4.2.4, 12.4.3	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
376			<ul> <li>If warranted, a numerical groundwater flow model will be used to simulate baseline groundwater flow conditions. The numerical model will include the assumptions developed as part of the conceptual model, the parameters and outputs of the watershed model and will be calibrated to onsite measurements</li> </ul>	Appendices 11- A and 11-B	Chapter 11.4.3.3	-	
377			<ul> <li>General description of the geographic setting, landforms, topography, drainage, climate, soil types, geomorphologic conditions</li> </ul>	Appendix 11-A	Chapter 11.4.1.1 to 11.4.1.4	-	
378			<ul> <li>General description of geologic setting; type and nature of geologic materials; vertical and lateral extent of individual geologic units; stratigraphy and structural features</li> </ul>	Appendix 11-A	Updated Chapter 11: Section 11.4.1.4; Sections 11.4.2.3 and 11.4.3.2; Section 11.4.3.3	-	
379			<ul> <li>Locations and descriptions of aquifers (confined, unconfined, unconsolidated, bedrock); aerial extent and thickness; aquifer properties (transmissivity, etc.)</li> </ul>	Appendix 11-A	Chapter 11.4.3 (Figure 11.4-17)	-	
380			<ul> <li>Assessment of aquifer budget, including amount and source(s) of recharge; quantity of ground water in aquifer storage; current amount of ground water extraction; amount of ground water discharge; potential amount available for future ground water extraction</li> </ul>	Appendix 11-A	Chapter 11.4.2, 11.4.3	-	
381			Description of local and regional ground water flow systems and rates of movement	Appendix 11-A	Chapter 11.4.3.3	-	
382			Evaluation of ambient ground water level trends	Appendix 11-A	Chapter 11.4.3.2, 11.4.3.3	-	
383			Evaluation of surface water / ground water interaction, including quantity and quality	Appendix 11-A	Chapter 11.4.2.3, 11.5.3.1 (Table 11.5-3) (Table 11.5-4)	-	
384			Evaluation of pumping test data from existing test or production wells	Appendix 11-A	Chapter 11.4.2.3	-	
385			Evaluation of ambient ground water quality conditions	Appendix 11-A	Chapter 11.4.2.3	-	
386			<ul> <li>Hydrogeologic maps and cross-sections outlining the extent of unconfined/confined unconsolidated aquifers and bedrock formations; locations of water wells, exploration holes, piezometers, springs, test pits; (potentiometric) water level contours; water quality contours (e.g. nitrates, salinity); directions and rates of ground water flows and locations of surface water courses.</li> </ul>	Appendix 11-A (Section 1.5.4) Appendix 12-A (Figure 1.2)	Chapter 11.3.2.2 (Figure 11.3-1); 11.4.1.4 (Figures 11.4-7; 11.4-8); 11.4.2.3 and 11.4.3.2 (Figures 11.3-12, 11.4-14); 11.4.3.3 (Figures 11.4-17 to 11.4-20)	-	
387	5.4.3	Assessment of Potential Effects and Proposed Mitigation	The Application will identify and evaluate potential effects of the proposed Project on hydrogeological conditions.	Appendix 14-E	Chapter 11.5 Chapter 14.5	-	
388			It will also identify appropriate mitigation measures and environmental management strategies to avoid, minimize, or otherwise mitigate potential effects of the proposed Project on hydrogeology conditions.	-	Chapter 11.5.2	Section 24.8	
389			This section will also include proposed monitoring programs, if required, for implementation during Project operations.	-	Chapter 11.5.2, 11.5.6	Section 24.8	

	AIR	AIR Section Number and			Location of Relevant Informat	ion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
390			The watershed model will be updated to include proposed minesite elements and proposed water management plans. The updated watershed model will assess potential reductions in streamflows as a result of minesite construction, operation and closure.	Appendix 12-B	Chapter 12.4.2.2	-	
391			Analytical and/or numerical models will be used to assess the potential effects of seepage from waste piles and/or tailings facilities and the potential effects of mine dewatering on the surrounding area.	Appendix 11-B	Chapter 11.4.3.3, 11.5.2.1, 11.5.2, 11.5.3	-	
392			The effects assessment report will include a discussion of the potential impacts of mine development on the groundwater resource quality and quantity and interrelated surface water resource.	-	Chapter 11.5.2.1, 11.5.2.2	-	
393	5.4.4	Potential Residual Effects and Their Significance	This sub-section will identify potential residual effects of the proposed Project on the site and surrounding hydrogeology after appropriate mitigation measures and environmental management strategies have been applied.	-	Chapter 11.5.3	-	
394			The overall significance of residual effects will be discussed and placed into context based on an assessment of predicted magnitude, geographic extent, duration/frequency, reversibility, context and probability (see Section 4.5 for details on these assessment criteria).	-	Chapter 11.5.4 to 11.5.6	-	
395	5.5.1	Introduction	This sub-section will provide an introduction and background to the assessment of the aquatic environment both on-site as well as off-site features potentially impacted by the Project based on a literature review of existing information.	-	Chapter 14.1, 14.4	-	
396			It will provide the rationale for the selection of various aquatic features (e.g., fisheries) as a Project specific VEC in consideration of potential issues related to potential interactions with Project infrastructure and activities.	-	Chapter 14.3.1	-	
397			It will also describe and/or map the physical (spatial) boundaries and timeframes (temporal) of the Study Area from which potential effects of construction, operations, and decommissioning phases of the proposed Project are anticipated to occur.	-	Chapter 14.3.2	-	
398			Literature and information used in the aquatic environment component will be obtained from a number of different sources, some of which are listed below:  • Information available through BC Species and Ecosystems Explorer (website)	-	Chapter 14.2, 14.4	-	
399			Species at Risk Act (website)	-	Chapter 14.2, 14.3.1, 14.4.1	-	
400			Water Survey of Canada hydrometric data	-	Chapter 14.2	-	
401			Provincial government Best Management Practices	-	Chapter 14.5.2	-	
402			Fisheries Information Summary System (FISS)	-	Chapter 14.4.1	-	FISS was used to determine historical and presence and distribution. FISS is described in Chapter 14, Section 14.4.1.
403			RISC fish and aquatic inventory standards	-	Chapter 14.4.2.1	-	RISC standards were used to survey fish and fish habitat for baseline studies. RISC standards for fish and fish habitat are described in Chapter 14, Section 14.4.2.1.

	AIR	AIR Section Number and			Location of Relevant Informati	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
404			Regional provincial and federal agency data files, and	-	Chapter 14.4.1	-	The following provincial and federal agency data files were searched:
							<ul> <li>BC Conservation Data Centre (BC CDC) Species and Ecosystem Explorer database (B.C. Conservation Data Centre 2014);</li> </ul>
							BC MOE EcoCat: the Ecological Reports Catalogue (BC MOE 2014a);
							<ul> <li>Federal Species at Risk Public Registry (Government of Canada 2014);</li> </ul>
							<ul> <li>Fisheries and Oceans Canada (DFO) Mapster (DFO 2014); and</li> </ul>
							BC MOE Habitat Wizard (BC MOE 2014c).
							The use of these data files is described in Chapter 14, Section 14.4.1.
405			Engineering reports detailing the mine plan.	Appendix 13-C	Chapter 13, 14	-	
106				Appendix 14-D	Cl		
406			The Application will include a summary of the existing background information as well as the results of site-specific surveys pertaining to the aquatic environment.	Appendix 14-A	Chapter 14.4.3	-	
407			This section of the Application will cover components such as surface	Appendix 13-A,	Chapter 13.4 (all sections)	-	
			water quality, hydrology, fish and fish habitat, sediment, periphyton, and benthic communities.	13-B, 14-A	Chapter 14.4 (all sections)		
408			The Application will also include habitat compensation plans, as required,	Appendix 14-E	Chapter 14.5.2	-	
			for wildlife/habitat impacts that cannot be mitigated or avoided in the section titled, "Summary of Proposed Environmental and Operational		(Table 14.5-2)		
			Management Plans".		Chapter 14.5.6		
			Ç		(Table 14.5-23) Table 14.7-1)		
740			Water quality, sediment, and fish tissue information will be collected from	Appendix 13-A,	Chapter 13.4.2.2		Water quality and sediment data sampling locations
740			North Barrière Lake as the lake outlet is a receiving water for Harper	13-B, 14-A	Chapter 14.4.2.1, 14.4.3.3	-	and methods are presented in Chapter 13.4.2.2
			Creek, and existing information will be identified for all lakes within the regional study area. Sediment, periphyton, and benthic invertebrates will		Chapter 14.4.2.1, 14.4.5.5		Fish tissue metals methods and data are presented in Chapter 14.4.2.1 and 14.4.3.3 respectively.
			be collected from two sites on the Barrière River. The purpose of collecting data from the regional study area is to provide information to supplement				
			existing baseline data to achieve an understanding of the environment				
			beyond the local study area, and as a basis for potential future monitoring.				
			There are five watercourses that may potentially be impacted by the				
			proposed development (Table 5.1: Jones Creek, Baker Creek, Chuck Creek, Avery Creek, and Harper Creek). Adjacent waterbodies are Lute Creek, Barrière River, Saskum Lake, and North Barrière Lake.				
409	5.5.2	Surface Water Quality	The Application will summarize surface water quality modelling, results, and predictions for selected watercourses in and around the Project area.	Appendix 13-C, 13-D	Chapter 13.5.2.3	-	
410			For in situ sample locations, details such as sampling frequency, timing, locations, and parameter results will be included.	Appendix 13-A, 13-B	Chapter 13.4.2.2	-	

	AIR AIR Section Number and		Lo	ocation of Relevant Inform	ation	
ID#	Section Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
411		Rationale as to water quality sample locations and length of monitoring program will also be discussed.	Appendix 13-A	Chapter 13.4.2.2	-	
412		Where available, historical surface water quality data will be used to supplement the ongoing site-specific water quality sampling program.	-	Chapter 13.4.2.1	-	
413		The results and detection limits for all analyzed parameters will be reported in this section of the Application.	Appendix 13-A, 13-B	Chapter 13.4.3	-	
414		Aluminum	Appendix 13-A	Chapter 13.4.2	-	
		Antimony	(Section 3.2.3)			
		• Arsenic	(Table 3.2-2),			
		Barium	13-B			
		Beryllium	Appendix 2-A to 13-A of			
		• Boron	Appendix 13-A			
		Cadmium	Appendix 15-71			
		Calcium				
		Chromium				
		• Cobalt				
		• Copper				
		• Iron				
		• Lead				
		• Lithium				
		Magnesium				
		Manganese				
		• Mercury				
		Molybdenum				
		• Nickel				
		• Potassium				
		• Selenium				
		• Silver				
		• Sodium				
		• Thallium				
		• Tin				
		• Titanium				
		• Uranium				
		• Vanadium				
44.=	550	• Zinc		Ol		
415	5.5.3 Sediments	This sub-section will present the rationale, methodology, and results of site-specific sediment sampling completed in selected waterbodies.	Appendix 14-A	Chapter 14.4.2	-	
416		Sediments samples will be analyzed for metals, total organic carbon, and grain size. Technical guidance for the design of the sediment program and data collection methods will be obtained from MOE (2011), Environment Canada (2002), and direction provided by provincial and federal agency staff.	Appendix 14-A	Chapter 14.4.2.3	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
417	5.5.4	Hydrology and Site Water	The Application will provide the rationale for the selection of hydrology as	Appendix 12-A	Chapter 12.3.1	-	
		Balance	a Project specific VEC and discuss the baseline condition of watercourses	Appendix 12.B	Chapter 12.4		
			and how they may be affected by the proposed Project.		Chapter 12.5.1		
418			This sub-section will also look at groundwater and surface water interactions	Appendix 12-B	Chapter 11.5.3.1 (Tables 11.5-3;	-	
			including groundwater recharge and potential seasonal effects on surface		11.5-4)		
			water and ground water levels.		12		
419			This section will also discuss the results of a detailed water balance	Appendix 12-B	Chapter 12.4.2.2	-	
			assessment.		Chapter 12.5.3.1		
420			The Application will provide a summary of the general hydrologic setting		Chapter 12.4	-	
			of the area and will summarize archived and historic data obtained from the Environment Canada operational hydrometric stations located at:				
421			Near the mouth of Harper Creek (08LB076)	Appendix 12-A	Chapter 12.4	_	
721			- Near the mount of Traiper Creek (oolboro)	Appendix 12-B	Chapter 12.4	-	
422			The North Thompson River at Birch Island (08LB047), and	Appendix 12-A	Chapter 12.4		
422			The North Thompson River at birth Island (66Lb047), and	Appendix 12-A Appendix 12-B	Chapter 12.4	-	
423			Barrière River below Sprague Creek (08LB069).	Appendix 12-B Appendix 12-A	Chapter 12.4		
423			barriere River below Sprague Creek (00Lb009).	Appendix 12-A Appendix 12-B	Chapter 12.4	-	
424				Аррения 12-в			
424			The Application will include data obtained from site-specific hydrometric stations (level-logger and baro- logger) that were installed as		-	-	
			detailed below:				
425			Lower reach of Baker Creek - installed April 2008, and	Appendix 12-A	Chapter 12.4	-	
				Appendix 12-B	-		
426			Lower reach of the Harper Creek tributary flowing from the proposed	Appendix 12-A	Chapter 12.4	-	
			tailings location - installed May 2009.	Appendix 12-B			
427			The Application will include a detailed site water balance assessment for the	Appendix 12-B	Chapter 12.4.2.2	-	
			Project.		Chapter 12.5.3.1		
428			This section will discuss various components of the Project in each phase of	Appendix 5-D,	Chapter 11.4.3.1 to 11.4.3.4	-	
			development, including water balance calculations, consideration for the	Appendix 12-B	Chapter 12.4.3		
			potential use of make-up water, and will provide estimates of parameters such as stream flow, groundwater flow, soil permeability, precipitation,				
			evaporation, and hydraulic roughness.				
429			The Project will be designed to operate without the need for make-up water	Appendix 5-D	Chapter 12.5.2	-	
			however; the EA will consider the potential need for make-up water in its	Section 6.7.2			
			assessments.	(Figure 6.10)			
				(Appendix E)			
430			Recharge and discharge locations within the Project area and the	-	Chapter 11.4.3.3 (Figure 11.4-	-	
			surrounding area will also be identified in this section of the Application.		18)		
431			The parameter estimates will include the information source, measurement	Appendix 12-B	Chapter 11.4.3.2	-	
			standards and/or collection protocols used, and will detail the assumptions built into the data set.		Chapter 12.4.3		
			built into the data set.				

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
432	5.5.5	Stream Habitat Assessment	This section of the Application will detail the results of site specific stream habitat assessments. Stream data cards, consistent with RISC Standards, will be completed at each major sampling location.	Appendix 14-A, 14-C	Chapter 12 Chapter 14.4.2.1, 14.4.2.2	-	RISC standards were used to survey fish and fish habitat for baseline studies. RISC standards for fish and fish habitat are described in Chapter 14, Section 14.4.2.1.
433			The stream habitat assessment will follow procedures outlined in Reconnaissance (1:20,000) Fish and Fish Habitat Inventories (RIC 2001a) and Assessment Methods for Aquatic Habitat and Instream Flow Characteristics in Support of Applications to Dam, Divert, or Extract Water from Streams in British Columbia (Lewis et al. 2004).	Appendix 14-C	Chapter 14.4.2.1, 14.4.2.2	-	RISC standards were used to survey fish and fish habitat for baseline studies. RISC standards for fish and fish habitat are described in Chapter 14, Section 14.4.2.1.
434			The scope of the stream habitat assessment will include collecting instream flow, water temperature, and channel geomorphology information to assess potential impacts resulting from reductions in water quantity.	Appendix 12-D, 14-A, 14-B	Chapter 14.4.2.2	-	Stream habitat assessment methods followed those described in <i>Guidelines for the collection and analysis of fish and fish habitat data for the purpose of assessing impacts from small scale hydro power projects in British Columbia</i> (Hatfield, Lewis, and Babakaiff 1997), and described in Chapter 14, Section 14.4.2.2.
435	5.5.6	Fish Surveys	This section of the Application will outline the results of the literature review completed on fish presence/absence and distribution within the Project footprint and the surrounding area, with emphasis on those watersheds that may potentially be impacted by the Project.	Appendix 14-A	Chapter 14.4.1, 14.4.2.1	-	
436			Existing information for Harper Creek and other waterbodies will be compiled from a variety of sources such as Fisheries Oceans Canada, the Ministry of Environment, watershed restoration reports, and existing databases (e.g. Fisheries Information Summary System and the Ecological Reports Catalogue (EcoCat).	Appendix 14-A	Chapter 14.4.1, 14.4.2.1	-	FISS, ECOCAT, and other data sources were used to determine existing information, and described in Chapter 14, Section 14.4.1.
437			Site-specific studies will be completed to determine/confirm fish presence/absence, spatial distribution, and fish habitat values.	Appendix 14-A	Chapter 14.4.1, 14.4.2.1, 14.4.3	-	
438			The methods used to enumerate fish and fish habitat will follow procedures outlined in RIC (2001a), Fish Collection Methods and Standards (RIC 1997b), Fish-stream Identification Guidebook (MOF 1998), Watershed Restoration Program Fisheries Habitat Assessment Procedures (FHAP) (Johnson and Slaney, 1996), and direction provided by provincial and federal agency staff.	Appendix 14-A	Chapter 14.4.1, 14.4.2.1	-	Provincial standards were used to survey fish and fish habitat for baseline studies, and described in Chapter 14, sections 14.4.2.1 and 14.4.2.2.
439			Anecdotal observations will be recorded where possible as part of other field work including fish species observed and habitat characteristics.	Appendix 14-A	Chapter 14.4.1, 14.4.2.1	-	
440			Seasonal fish surveys will be conducted to fully characterize fish use of the local study area.	Appendix 14-A	Chapter 14.4.1, 14.4.2.1	-	
441	5.5.7	Fish Tissue Analysis	This section of the Application will detail the rationale, methodology, and results of baseline fish-tissue analysis.	Appendices 14-A, 14-B	Chapter 14.4.3.3	-	
442			Fish tissues will be analyzed for metals and will provide valuable data for baseline characterization for future monitoring.	Appendix 14-A, 14-B	Chapter 14.4.3.3	-	
443			Technical guidance for the design of the fish tissue program and data collection methods will be obtained from MOE (2011), Environment Canada (2002), and direction provided by provincial and federal agency staff.	Appendix 14-A, 14-B	Chapter 14.4.2.1	-	Direction was provided by MOE and Environment Canada staff through the issuing of fish collection permits for lethal sampling during fish tissue metals baseline studies, and described in Chapter 14, sections 14.4.2.1

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
444	5.5.8	Benthic Invertebrates	The Application will present the rationale, methodology, and results of site-specific benthic-invertebrate assessments.	Appendix 14-A	Chapter 14.4.2.3, 14.4.3.5	-	
445			Benthic-invertebrate samples (including detailed taxonomy) will be collected from selected watercourses that may potentially be impacted by the Project and from reference sites in the surrounding area.	Appendix 14-A	Chapter 14.4.2.3, 14.4.3.5	-	
446			Technical guidance for the design of the benthic invertebrate program and data collection methods will be obtained from MOE (2011), Environment Canada (2002), and direction provided by provincial and federal agency staff.	Appendix 14-A	Chapter 14.4.2.3, 14.4.3.5	-	
447	5.5.9	Periphyton	The Application will include a summary of the rationale, methodology, and results of periphyton and chlorophyll-a sampling.	Appendix 14-A	Chapter 14.4.2.3, 14.4.3.5	-	
448			Technical guidance for the design of the periphyton program and data collection methods will be obtained from MOE (2011), Environment Canada (2002), and direction provided by provincial and federal agency staff.	Appendix 14-A	Chapter 14.4.2.3, 14.4.3.5	-	
449	5.5.10	Summary of Rare, Threatened, and Endangered Species	This section of the Application will summarize known rare, threatened, and endangered aquatic species identified through the literature review process and site specific surveys.		Chapter 14.3, 14.4	-	
450			Species listed on Schedule 1 of SARA and/or species of Special Concern under COSEWIC with the potential to occur within the study area will be listed and discussed herein.	Appendix 14-A	Chapter 14.3.1.3, 14.4.3.1 to 14.4.3.4	-	
451			Mitigation and/or management measures will be included, if required.	Appendix 14-A	Chapter 14.5.2	Section 24.6, 24.12	
452			The Application will also include an assessment of species of special interest (e.g., species significant to First Nations and/or local stakeholders) that may be found in the Project area.	Appendix 14-A Appendix 23-C	Chapter 14.4.3.1, 14.5.3 to 14.5.6 Chapter 22 Chapter 23	-	
453	5.5.11	Assessment of Potential Effects and Proposed Mitigation	The Application will identify and evaluate potential effects of the proposed Project on aquatic features.	-	Chapter 14.5.1	-	
454			This sub-section will also clearly identify and describe proposed mitigation measures and environmental management strategies to avoid, minimize, or mitigate potential adverse effects on aquatic flora and fauna during proposed construction, operations, and decommissioning phases of the Project. Mitigation measures will include:	-	Chapter 14.5.2	Section 24.6	
455			Development and implementation of appropriate erosion and sediment control plans specific to each phase of the mine	-	Chapter 14.5.2.3	Section 24.11	
456			Development and implementation of a detailed site water management plan, and	-	Chapter 14.5.2.3	Section 24.13	
457			If required, develop (in consultation with regulators) a suitable fish habitat compensation plan.	Appendix 14-E	Chapter 14.5.2, 14.5.2.1	-	
458			Where applicable, the assessment of potential aquatic effects will provide cross-references to relevant parts of the hydrology, hydrogeology, and geochemical modelling sections of the Application.	-	Chapter 14.5.2.2, 14.5.2.3, 14.5.3	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
459			Receiving water quality will be modelled in the impact assessment. The modelled results will be assessed against criteria to protect aquatic life to assess potential impacts.	Appendix 13-C, 13-D	Chapter 13.5.2, 13.5.4 Chapter 14.5.3.1, 14.5.3.2, 14.5.3.3, 14.5.3.4	-	
460	5.5.12	Potential Residual Effects and their Significance	This sub-section will identify potential residual effects of the proposed Project on aquatic features/components after appropriate mitigation measures and environmental management strategies have been applied.	-	Chapter 14.5.3	-	
461			The overall significance of residual effects will be discussed and placed into context based on an assessment of predicted magnitude, geographic extent, duration/frequency, reversibility, context and probability (see Section 4.5 for details on these assessment criteria).	-	Chapter 13.5.4, 13.5.5, 13.5.6 Chapter 14.5.3, 14.5.4, 14.5.5, 14.5.6	Section 24.6	
462	5.6.1	Introduction	The Application will include a summary of existing historical information (based on a literature review) and the results of site-specific surveys completed on site to provide a complete understanding of the terrestrial environment of the Project area and surrounding areas.	Appendix 15-A, 2.2, 3.1, 3.2, 3.3, 3.4, 3.5	Chapter 15.4.1, 15.4.2, 15.4.3 Chapter 16.4.1, 16.4.2,16.4.3	-	
463			This section of the Application will cover components such as vegetation and terrestrial wildlife, including listed species/species of special interest.	Appendix 15-A	Chapter 15.3.1.3, 15.3.1.4, 15.4.2, 15.4.3 Chapter 16.4.3	-	
464			Literature and information used in the terrestrial environment component will be obtained from a number of different sources, some of which are listed below:	Appendix 15-A, 1.7, 2.2	Chapter 15.4.2, 15.4.3 Chapter 16.4.2, 16.4.3	-	
			<ul> <li>Information available through BC Species and Ecosystems Explorer (website)</li> </ul>				
465			Information available through BC Identified Wildlife Management Strategy (website)	Appendix 15-A	Chapter 16.2.2, 16.4.2, 16.4.3	-	
466			Information available through BC Conservation Framework (website)	Appendix 15-A, 1.7, 2.2	Chapter 15.4.2, 15.4.3 Chapter 16.2.1, 16.4.2, 16.4.3	-	
467			Species at Risk Act (website)	Appendix 15-A, 1.7, 2.2	Chapter 15.4.2, 15.4.3 Chapter 16.4.2, 16.4.3	-	
468			Provincial government Best Management Practices	Appendix 15-A, 2.1.3	Chapter 15.2, 15.5.2 Chapter 16.2.3	-	
469			Digital spatial files from the Land and Resource Data Warehouse (e.g. biogeoclimatic subzone boundaries, ungulate winter ranges, Wildlife Habitat Areas, parks and protected areas boundaries)	Appendix 15-A, 1.6.2	Chapter 15.4.1, 15.4.3.4 Chapter 16.4	-	
470			RISC wildlife inventory standards	Appendix 15-A	Chapter 16.4.2, 16.4.3	-	
471			BC Forest Cover Vegetation Resources Inventory (VRI) mapping, and	Appendix 15-A, 3.3.1	Chapter 15.4.3.4	-	
472			<ul> <li>Engineering reports detailing the methodologies and approaches for the various aspects of mine construction.</li> </ul>	Appendix 5-A, 5-D, 15-A	Chapter 5, 15	-	
473	5.6.2	Baseline Conditions	The Application will present the results of various site-specific surveys pertaining to wildlife presence/absence, potential abundance, distribution, and habitat within and immediately adjacent to the Project area and truck haul route. Field surveys will be used to:	Appendix 15-A, 3.0 to 3.24, 4.1 to 4.24,	Chapter 15.4 Chapter 16.4	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
474			<ul> <li>Confirm presence of target wildlife and vegetation species and ecosystems</li> </ul>	Appendix 15-A, 4.1 to 4.24	Chapter 15.4.3 Chapter 16.4.3	-	
475			Confirm habitat associations of target species	Appendix 15-A, 4.1	Chapter 15.4.3 Chapter 16.4.2, 16.4.3	-	
476			Confirm locations of important wildlife features, and	Appendix 15-A	Chapter 16.2.2, 16.4	-	
477			<ul> <li>Confirm habitat characteristics and accuracy of the typed polygons within mapped areas.</li> </ul>	Appendix 15-A (4.2.1.1)	Chapter 15.4.2.2 Chapter 16.4.2	-	
478			Wildlife/habitat surveys will follow procedures outlined in the following guidance documents:  • BC wildlife habitat rating standards. Version 2.0 (RIC 1999b)	Appendix 15-A (3.1 to 3.24)	Chapter 15.4.2.2 Chapter 16.4.2	-	
479			<ul> <li>Field manual for describing terrestrial ecosystems (MELP and MOF 1998)</li> </ul>	Appendix 15-A (3.2.1.1)	Chapter 15.4.2.2	-	
480			Inventory methods for forest and grassland songbirds (RIC 1999a)	Appendix 15-A (3.9.1.2, 3.13.1)	Chapter 16.4.2.2, 16.4.2.5	-	
481			Inventory Methods for Owl Surveys. Version 1.0 (Hausleitner 2006)	Appendix 15-A (Section (3.16.1.1)		-	
482			Inventory methods for pond-breeding amphibians and painted turtle (RIC 1998c)	Appendix 15-A (3.8.1)	Chapter 16.4.2.1	-	
483			Inventory methods for raptors. Version 2.0. (RIC 2001b)	Appendix 15-A (3.14 and 3.15)	Chapter 16.4.2.6, 16.4.2.7	-	
484			Inventory methods for terrestrial arthropods (RIC 1998b), and	Appendix 15-A (3.6.1.1)	Chapter 16.3.1	-	
485			Protocols for Rare Plant Surveys (Klinkenberg and Penny 2006).	Appendix 15-A (3.1.1.1)	Chapter 15.4.2.1	-	
486			Locations of field studies and of any special habitat features will be documented using Global Positioning System (GPS) receivers and recorded in North American Datum (NAD 83) Universal Transverse Mercator (UTMs).	Appendix 15-A (3.1.1.1)	Chapter 16.4.2	-	
487			Representational habitats and any significant habitat features will be photographed.	Appendix 15-A (Appendix 2)	Chapter 15.6.7.1, 15.6.7.2	-	
488			The Application will describe the rationale for selecting and assessing the specific VC, based on baseline data, consultation activities, and any available and relevant traditional ecological or community knowledge in consideration of potential issues related to potential interactions with Project infrastructure and activities.	Appendix 15-A Appendix 15-C	Chapter 15 and 16 Sections X.3, X.4	-	
489			For terrestrial wildlife and vegetation, VCs will include terrestrial wildlife species/subspecies, vegetation species/subspecies, and sensitive/rare ecological communities.	Appendix 15-A	Chapter 15 and 16 Sections X.4.2, X.4.3	-	
490			A rationale for VC selection will be provided in the Application. A variety of sources used for the selection will include:	Appendix 15-A	Chapter 15 and 16 Sections X.3.1	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
491			<ul> <li>lists of Red and Blue-listed wildlife and plant taxa thought to occur within the Headwaters Forest District as provided by the BC Conservation Data Centre</li> </ul>	Appendix 15-A (2.2.1, 2.2.7 to 2.2.28)	Chapter 15, Table 15.5-13; Figure 15.5-3, Section 15.5.3.3 Chapter 16.3.1.2	-	
492			<ul> <li>information on actual known location records of Red or Blue-listed taxa in or near the study area (provided by the BC Conservation Data Centre)</li> </ul>	Appendix 15-A (2.2.1, 2.2.7 to 2.2.28)	Chapter 15, Table 15.5-13; Figure 15.5-3, Section 15.5.3.3 Chapter 16.3.1.2, 16.4.2	-	
493			information on SARA-listed taxa provided by the Government of Canada	Appendix 15-A (2.2.1, 2.2.7 to 2.2.28)	Chapter 15.3.1.2, 15.4.2., 15.4.3 Chapter 16.3.1.2, 16.4.2, 16.4.3	-	
494			taxa listed as part of the Identified Wildlife Management Strategy (IWMS)	Appendix 15-A	Chapter 16.2.2, 16.3, 16.4	-	
495			taxa of regional concern, and	Appendix 15-A	Chapter 15.4.2.1, 15.4.3.1 Chapter 16.3, 16.4	-	
496			data from targeted wildlife surveys and from incidental observations.	Appendix 15-A Appendix 15-B	Chapter 16.4.3	-	
497			Seven wildlife species, as subsets of the selected VCs are chosen for wildlife habitat suitability modelling. The species chosen for mapping include:	Appendix 15-A	Chapter 16.4.2, 16.4.3	-	
498			western toad	Appendix 15-A (3.8.1)	Chapter 16.4.3.1, 16.8.6, 16.8-7 (Table 16.8-8) (Table 16.9-1)	-	
499			Olive-sided Flycatcher	Appendix 15-A (3.13.1)	Chapter 16.4.3.5	-	
500			Northern Goshawk	Appendix 15-A (3.15.1)	Chapter 16.4.3.7	-	
501			mule deer	Appendix 15-A (3.23.1.2)	Chapter 16.4.3.14	-	The habitat models for mule deer focused on the use of the existing BC MOE "critical deer winter range" data because winter is the limiting season for deer.
502			grizzly bear	Appendix 15-A (3.19.1)	Chapter 16.4.3.11	-	
503			mountain caribou, and	Appendix 15-A (3.21.1)	Chapter 16.4.3.12	-	
504			• moose.	Appendix 15-A (3.20.1)	Chapter 16.4.3.12	-	
505	5.6.3	Summary of Rare, Threatened, and Endangered Species	This section of the Application will summarize known rare, threatened, and endangered terrestrial species identified through the literature review process and site specific surveys.	Appendix 15-A Appendix 15-B	Chapter 15.4.3.1 Chapter 16.4.3, 16.3.1.2	-	
506			Species listed on Schedule 1 of SARA and/or species of Special Concern under COSEWIC with the potential to occur within the study area will be listed and discussed herein.	Appendix 15-A Appendix 15-B	Chapter 15.4.3.1 Chapter 16.4.3, 16.3.1.2	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
507			Mitigation and/or management measures will be included as required.	Appendix 15-A	Chapter 15.5.2, 15.5.2.3 Chapter 16.5.2	Section 24.17, 24.19	
508			The Application will also include an assessment of species of special interest (e.g., species significant to First Nations and/or local stakeholders) that may be found in the Project area.	Appendix 15-A Appendix 15-C	Chapter 15.3.1.2, 15.3.1.3 Chapter 16.3.1	-	
509	5.6.4	Assessment of Potential Effects and Proposed Mitigation	The Application will identify and evaluate potential effects of the proposed Project on terrestrial flora and fauna. Potential effects may include, but are not limited to: habitat alteration, loss or fragmentation, displacement and disturbance of vegetation and wildlife, access management, and potential introduction of invasive plant species.	-	Chapter 15.5.1.1, 15.5.2, 15.5.3 Chapter 16.5.1, 16.6.1 to 16.6.13	-	
510			This section will also identify and describe mitigation measures and environmental management strategies to avoid, minimize or mitigate potential adverse effects on vegetation and wildlife resources during proposed construction, operations, and decommissioning phases of the Project.	-	Chapter 15.5.2 Chapter 16.5.2	Section 24.17, 24.19	
511	5.6.5	Potential Residual Effects and Their Significance	This sub-section will identify potential residual effects of the proposed Project on terrestrial flora and fauna after appropriate mitigation measures and environmental management strategies have been applied.	-	Chapter 15.5.2, 15.5.3 Chapter 16.6.1 to 16.6.14	-	
512			The overall significance of residual effects will be discussed and placed into context based on an assessment of predicted magnitude, geographic extent, duration/frequency, reversibility, context and probability (see Section 4.5 for details on these assessment criteria).	-	Chapter 15.5.3, 15.5.4 Chapter 16.6.1 to 16.6.17	-	
513	6.	Assessment of Potential Social and Economic Effects	This section of the Application will:  (i) describe the socio-economic project setting and baseline characterization	Appendix 17-A	Chapter 17.4	-	
514			(ii) assess the socio-economic project effects, mitigation requirements, and residual effects.	-	Chapter 17.5	-	
515	6.1	Project Setting and Baseline Characterization	The Application will describe the socio-economic setting surrounding the Project site.	Appendix 17-A	Chapter 17.4.1, 22.3.1	-	
516			It will include a review of regional and community profiles featuring, among other things, discussion of historical development, political organization, and cultural characteristics, and an examination of recent data and trends in population, demographic characteristics, main economic activities, and labour force, employment and labour income.	Appendix 17-A	Chapter 17.4.1.1 to 17.4.1.6, 17.4.3.1 to 17.4.3.3	-	
517			Information will be presented on: housing and temporary accommodation, social conditions, education/technical training, health and social services, recreational facilities and services, law enforcement and fire protection, infrastructure including utilities and transportation, and regional and municipal planning initiatives as well as municipal finances.	Appendix 17-A	Chapter 17.4.3.4 to 17.4.3.13	-	

	AIR	AIR Section Number and			Location of Relevant Informati	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
518			The baseline will also describe economic development trends in the region and include a list of approved and other reasonably foreseeable projects that may be competing for labour and other resources.	Appendix 17-A	Chapter 8.7.1.3 (Table 8.7-1) Chapter 17.4.1.1 to 17.4.1.6 Chapter 17.4.3.2, 17.4.3.3 (Figure 17.6-1; Table 17.6-1) Chapter 17.6.6	-	The list of approved and other reasonably foreseeable projects is included only in the Cumulative Effects Assessment section with respect to one effect on employment.
519			Data limitations and methodologies will be identified, and study boundaries will be defined and rationalized.		Chapter 17.4.1	-	
520			The socio-economic baseline and assessment will focus on the communities located in the northern portions of the Regional District of Thompson Nicola.	Appendix 17-A	Chapter 17.4.1.1 to 17.4.1.6	-	
521			Likely, the regional socio-economic study area will include Electoral Areas A, B, O and P (and the unincorporated communities situated in those Electoral Areas), the communities of Clearwater, Vavenby, Barriere, Sun Peaks and Chase, and the City of Kamloops.		Chapter 17.3.2.2 (Figure 17.3-1)	-	
522			The regional socio-economic study area will encompass those First Nations communities that will be potentially affected by the Project, including the Simpcw, Adams Lake, Little Shuswap and Neskonlith Bands, which are members of the Shuswap Nation Tribal Council.		Chapter 17.3.2.2 (Figure 17.3-1) Chapter 22.3.3.1 to 22.3.3.4	-	
523			The socio-economic team will conduct a literature search and review (from the 2001 and 2006 Census of Canada and sources such as the most recent BC Statistics community profiles and results from the recently published District of Clearwater 2011 Community Economic Development Plan), verify data through interviews, meetings and consultations with knowledgeable individuals, and review information gathered through the public consultation program.		Chapter 17.4.2 (Table 17.4-1, 17.4-2)	-	
524	6.2	Land Use	The Application will provide an overview of existing land use in and around the Project area.	-	Chapter 18.1.1,18.4.1 (Table 18.4-1)	-	
525			This section will include information pertaining to forestry, agriculture, and recreation land uses. Sources of information include the Kamloops Land and Resource Management Plan (1995). Current information regarding land use will be obtained through ongoing consultation with local stakeholders.	-	Chapter 18.4.2.1,18.4.3.1, 18.4.3.6, 18.4.3.7, 18.4.3.10	-	
526	6.2.1	Forestry	The Application will provide information about historic forestry activities within and around the Project area and pertaining to areas where active logging continues.	-	Chapter 18.4.3.6	-	
527	6.2.2	Agriculture	This sub-section of the Application will describe the status of agricultural activity within the surrounding communities.	-	Chapter 18.4.3.7	-	
528	6.2.3	Recreational Land Use	This sub-section of the Application will describe the known recreational land uses within and adjacent to the Project area.	-	Chapter 18.4.3.10	-	
529			This section will also consider potential visual impacts of the Project on the North Thompson River valley near Vavenby and the surrounding recreational areas such as Dunn Peak.	-	Chapter 19.4.2.4, 19.4.3	-	

	AIR	AIR Section Number and			Location of Relevant Informat	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
530			Visual Quality Assessments will be conducted for this purpose from strategic viewpoints.	-	Chapter 19.4.2.5	-	
531	6.3	Water Use	The Application will provide an overview of existing water use in and around the Project area.		Chapter 18.4.3.8, 18.4.3.10, 18.4.3.13	-	
532			This section will include information pertaining to navigable waters, existing water licences, and recreational water uses.	-	Chapter 18.4.3.8, 18.4.3.10, 18.4.3.13, 18.4.3.14 (Figure 18.4-11) (Figure 18.4-12) (Table 18.4-7) Chapter 21.4.1, 21.4.2.3 (Figure 21.3-1)	-	
533	6.3.1	Navigable Waters	This sub-section will discuss if the waterbodies within and surrounding the Project are used for navigable purposes.	-	Chapter 18.4.3.14	-	
534			Provide details as to the extent of their use and the type of navigable activities that occur on each system.	-	Chapter 18.4.3.14	-	
535	6.3.2	Water Licences	This section will outline known existing water licences on streams located within and near the proposed Project area.	-	Chapter 18.4.3.8	-	
536	6.3.3	Recreational Water Use	Recreational water uses will be discussed in this section of the Application and will outline known recreational activities that occur within and near waterbodies that may be impacted by the Project.	-	Chapter 18.4.3.10	-	
537	6.4	Project Effects, Mitigation Requirements, And Residual Effects	The Application will describe the approach and methodology for the assessment of socio-economic effects of the Project.	-	Chapter 17.3	-	
538			This will include the rationale for inclusion of socio-economic VCs, the measurement of social and economic effects, the design of mitigation and enhancement measures (for negative and positive effects, respectively), the characterization of residual effects and their significance, and the manner in which cumulative effects will be assessed.	-	Chapter 17.3.1.2, 17.3.1.3, 17.5, 17.6	-	
539			For the purpose of assessing social and economic effects, the socio-economic team will describe key Project details which would have a bearing on economic and socio-economic conditions. Of special note will be capital construction cost estimates, estimated operating costs, employment estimates, contractor supply services estimates, and estimated annual government revenues.	-	Chapter 1.9.1 to 1.9.6 Chapter 17.3.1.3 (Table 17.3-2) Chapter 17.5.2 (Table 17.5-1)	-	
540			Other policies or strategies used to minimize adverse effects and enhance positive effects will also be described, among them work rotations, arrangements for worker accommodation and transportation, and company hiring and procurement policies.	-	Chapter 17.5.2, 17.5.3.2 to 17.5.7.1.2 (Table 17.3-1	-	
541			For each VC, the socio-economic team will describe the potential effects of the Project on the economy, socio-cultural well-being and community development. Potential effects that have been identified during issues scoping include:	-	Chapter 1.9 Chapter 17.5.2	-	
542			direct employment and training opportunities for regional residents	-	Chapter 1.9.3.1 to 1.9.3.3	-	

	AIR	AIR Section Number and			Location of Relevant Informati	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
543			contract and business opportunities for local and regional businesses	-	Chapter 1.9.4.1	-	
544			adequacy of public safety and protection, and	-	Chapter 17.5.2	-	
545			<ul> <li>preservation of the health and well-being of communities, families and individuals.</li> </ul>	-	Chapter 17.5.2	-	
546			Among the economic effects which will be analyzed and discussed are:	-	Chapter 1.9 Chapter 17.5.2	-	
547			effects on provincial Gross Domestic Product (GDP) and other macro- economic indicators	-	Chapter 1.9.4.2	-	
548			estimated effects on provincial and local government finances	-	Chapter 1.9.4.2	-	
549			labour income generated	-	Chapter 1.9.3.2	-	
550			effects on employment	-	Chapter 1.9.3.2 Chapter 17.5.2	-	
551			the potential for inflation and cost of living effects, and	-	Chapter 17.3.1.3, 17.5.2 (Table 17.5-2)	-	
552			opportunities for sustainable economic development.	-	Chapter 1.9.5	-	
553			Key social and socio-economic effects which will be analyzed and discussed are:	-	Chapter 17.3.1.3, 17.5.2	-	
554			population influx into the region	-	Chapter 17.3.1.3 (Table 17.3-1) Chapter 17.5.3.1	-	
555			resulting effects on educational, health and community services, and	-	Chapter 17.3.1.3, 17.5.2	-	
556			<ul> <li>resulting effects on physical infrastructure – this includes examination of how the Project will add to traffic volumes on regional road systems.</li> </ul>	-	Chapter 17.3.1.3, 17.5.2	-	
557			In the course of the assessment, note will be made of linkages between potential socio-economic effects and environmental effects.	-	Chapter 17.3.1.1 (Table 17.3-1) Chapter 23.5.2	-	
558			The Application will provide a summary of project-related socio-economic effects in the context of other proposed economic development in the region (i.e., cumulative effects) and will identify and characterize any residual effects that may result after the proposed mitigation and enhancement strategies have been implemented.	-	Section 17.6.1 to 17.6.6	-	
559	6.5	Summary of Assessment of Potential Social and Economic Effects	This section of the Application will include a table summarizing completed assessments of potential effects to social and economic effects components. An example of the type of table that may be provided in the Application is contained in Table 6.1 of the AIR.	-	Table 17.7-1	-	

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	AIR	AIR Section Number and			Location of Relevant Informat	ion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
560	7.1	Heritage Background	This section of the Application will focus on Valued Cultural Heritage Components and provide a brief description on components such as existing information on archaeology, historical use and cultural heritage resources located within the zone of potential influence of the Project. British Columbia's archaeological resources are protected under the Heritage Conservation Act. In accordance with this Act and the Freedom of information and Protection of Privacy Act, the Application cannot include information detailing the location of valued cultural heritage components in text or through maps with a scale larger than 1:250,000. These measures are necessary to prevent vandalism and other unauthorized alterations.	Appendix 20-A Appendix 20-B Appendix 20-C	Chapter 20	-	
561			Each assessed component will include a section that discusses potential effects and recommended mitigation measures, and potential residual effects and their significance.	-	Chapter 20.5.1 to 20.5.6	-	
562	7.2.1	Introduction	This section will provide an introduction and background to the Archaeological, Historical, and Cultural Heritage Resources Assessment.	-	Chapter 20.1 to 20.2	-	
563			Describe the methodology and rationale used for the assessment as well as present and map the physical boundaries and timeframes of the Study Area from which potential effects of construction, operations, and decommissioning phases of the proposed Project are anticipated to occur.	-	Chapter 20.3.1 to 20.3.2	-	
564	7.2.2	Baseline Conditions	The Application will include results of an Archaeological Overview Assessment (AOA), and a site specific Archaeological Impact Assessment (AIA) which will be completed with the assistance of local First Nations communities.	Appendix 20-A Appendix 20-B	Chapter 20.4.2	-	
565			The Kamloops Timber Supply Area (TSA) Archaeology Overview Assessment Model will be used.	Appendix 20-D	Chapter 20.4.2	-	
566			The objective of the AIA is to inventory and document archaeological sites in potential conflict with the proposed Project, determine site significance, assess potential impacts, and provide recommendations on mitigating potential adverse impacts.	Appendix 20-A	Chapter 20.5.1	-	
567			An archaeology consultant will be used that has a good working relationship with the local First Nations.	Appendix 20-A Appendix 20-B	Chapter 20.5.2	-	
568			All archaeology surveys will be conducted in accordance with the Heritage Conservation Act and conform to the technical standards approved, and used, by the Archaeology Branch.	Appendix 20-A Appendix 20-B	Chapter 20.5.2	-	
569			The archaeology work will also provide a summary of existing information on historic and cultural use obtained during the literature review process.	Appendix 20-C Appendix 22-A	Chapter 20.4.1 to 20.4.3	-	
570			A valid Section 14 (Heritage Inspection) Permit will be obtained to allow detailed archaeological work to commence in 2011.	-	Chapter 20.5.2.1	-	
571	7.2.3	Assessment of Potential Effects and Proposed Mitigation	This section will identify and evaluate potential effects of the proposed Project on archaeological, and other cultural heritage resources.	-	Chapter 20.5.1	-	
572			If archaeological sites are identified as a result of the AIA, the Application would outline mechanisms for avoidance or appropriate mitigation of potential adverse effects of the proposed Project.	-	Chapter 20.5.2.2	Section 24.3	

	AIR	AIR Section Number and			Location of Relevant Informati	ion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
573			The Application would also provide procedures to be followed in the event that archaeological materials are unexpectedly encountered during proposed Project development.	-	Chapter 20.5.2.1, 20.5.2.2	Section 24.3	
574			Archaeological impact management measures may include proposed Project monitoring, if necessary, to ensure that potential adverse impacts to archaeological resources which could not be predicted or evaluated prior to construction are addressed.	-	Chapter 20.5.2	Section 24.3	
575	7.2.4	Potential Residual Effects and their Significance	The Application will identify and describe potential residual effects after mitigation efforts have been completed.	-	Chapter 20.5.3	-	
576			An assessment of the significance of the identified residual effects will be included and will consider magnitude, geographic extent, duration and frequency, reversibility, context and probability.	-	Chapter 20.5.4, 20.5.5	-	
577	7.3	Summary of Assessment of Potential Heritage Effects	This section of the Application will include a table summarizing completed assessments of potential effects to valued cultural heritage components. An example of the type of table that may be provided in the Application can be seen in Table 7.1 of the AIR.	-	Chapter 20.5.6	-	
578	8.1	Background	This section of the Application will focus on Valued Health Components.	-	Chapter 17.3.1.2 (Table 17.3-1) Chapter 17.5.2	-	
579			These components include topics such as worker safety and health, recreational or aesthetic features, levels of physical activities in the region and other features or indicators of community health and healthy living. Healthy living is a mandatory Valued Health Component to be assessed and reported on in the Application.	-	Chapter 17.3.1.2, 17.3.1.3 (Table 17.3-1, 17.3-2) Chapter 17.4.1, 17.4.3 Chapter 17.5.2	-	
580			The Application will focus on how the Project will contribute to enabling or enhancing physical activities and fitness, and health education of people that will be employed by the Project.	-	Chapter 17.4.3.13 Chapter 17.5.2, Table 17.5-2	-	
581			Each assessment pertaining to a Valued Health Component detailed in this chapter will include an introduction, methodology and a summary of existing baseline conditions.	-	Chapter 17.3, 17.4	-	
582			Each assessed component will also include a section that discusses potential effects and recommended mitigation measures, potential residual effects and their significance.	-	Chapter 17.5.1 to 17.5.7	-	
583	8.2.1	Introduction	This sub-section of the Application will describe current socio-community health and well-being characteristics within the region.	-	Chapter 17.4.3.13	-	
584			Highlight (where information is readily available) information such as community demographics, dependency ratios, poverty rates, health morbidity, housing costs and availability, education, medical, social and community support services, crime rates, public safety/protection services and institutions, incidence of drug/alcohol use (other health behaviours), social networks, and community safety infrastructure.	-	Chapter 17.4.3.13	-	
585	8.2.2	Assessment of Potential Effects and Proposed Mitigation	This sub-section will identify and evaluate potential effects of the proposed Project on community health and well-being.	-	Chapter 17.5.2	-	

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	AIR	AIR Section Number and			Location of Relevant Informati	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
586			Outline YMI company policies in relation to supporting employee and	-	Chapter 17.5.3	-	
			contractor health, safety, and well-being.		Chapter 24		
587	8.2.3	Potential Residual Effects and their Significance	This sub-section will identify and describe potential residual effects following implementation of mitigation measures and management strategies such as YMI Company policies focussed on employee health and well-being.	-	NA	-	None identified.
588			Other mitigation measures may include the evaluation of opportunities to enhance the extent and availability of local recreational activities.	-	NA	-	Not applicable
589			The significance of the potential residual effects of the proposed Project will be determined considering magnitude, geographic extent, duration and frequency, reversibility, context and probability, as appropriate	-	NA	-	Not applicable.
590	8.3	Human Health Effects		-		-	
591	8.3.1	Introduction	This sub-section will summarize existing air quality, noise, country foods, groundwater, and surface water quality conditions associated with the proposed Project in reference to human health.	Appendix 21-A	Chapter 21.1, 21.4.1 to 21.4.3	-	
592			Describe the human environment and include a map depicting the proximity of people to mining activities such as to the rail loadout facility and mine access roads.	Appendix 21-B	Chapter 21.3.1, 21.3.2, 21.4.1, (Figure 21.3-1)	-	
593	8.3.2	Drinking Water Quality	This section of the Application will focus on the quality of drinking water within the Project area and end users that could potentially be impacted by the Project.	Appendix 21-B	Chapter 21.3.1, 21.3.2, 21.4.1, 21.4.2.3, 21.4.3.3	-	
594			An assessment of water intakes, including existing groundwater wells used for drinking water, within and near the Project site will be completed, and the results of this assessment will be reported in the Application.	Appendix 21-B	Chapter 21.4.2.3, 21.4.3.3,	-	
595			The water intake assessment would aim to identify intake sources that may potentially be impacted by the Project and would review items such as provincial databases and local records, and provide maps that depict the identified extraction points and sensitive areas.	Appendix 21-B	Chapter 21.3.1.2, 21.3.2.2, 21.3.2.3 Figure 21.6-4 Figure 11.4-12	-	
596			The "Action Plan for Safe Drinking Water in British Columbia", will be reviewed as part of the overall assessment.	-	Chapter 21.2.3	-	
597			The Application will also discuss natural ecosystem processes that treat and filter water that may be impacted by the proposed Project.	-	Chapter 21.5.1.3	-	
598			Information pertaining to water licences within and near the Project area will be included in the "Water Use" section under "Assessment of Potential Social and Economic Effects". If mitigation measures are required they will be detailed in the Section 8.3.5.	Appendix 13-D	Chapter 13 Chapter 18.5.1.1 Figures 18.4-11, 18.4-12, Table 18.4-1 Chapter 21.3.1.2, 21.3.2.2, 21.3.2.3; Chapter 21.5 Figure 21.6-4	-	
599	8.3.3	Noise	This section of the Application will provide an introduction and background to current noise levels within and around the Project footprint.	Appendix 10-A	Chapter 10.4.1 to 10.4.3 Chapter 21.4.1, 21.4.2.4, 21.4.3.4	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
600			Detail the rationale, methodology, and results of site specific assessments.	Appendix 10-B	Chapter 10.3, 10.5 Chapter 21.3.1.2, 21.3.2.1 to 21.3.2.3 Baseline: Chapter 21.4.1, 21.4.2.4, 21.4.3.4	-	
601			If applicable, proposed mitigation of increased noise levels will be discussed in Section 8.3.5.	-	Chapter 10.5.3 Chapter 21.5.2.4	-	
602			No provincial or federal standards exist for noise levels; therefore, modelled noise and predicted vibration levels will be assessed in accordance with Environment Canada (2010).	-	Chapter 10.2, 10.5.4.1 Chapter 21.2.4	-	
603			The assessment of noise baseline and Project effects will be conducted according to Health Canada (2011) and ISO (1996).	-	Chapter 10.2,10.5.4.1 Chapter 21.2.4	-	
604	8.3.4	Country Foods	This section of the EA will discuss the local land use within and near the Project footprint in the context of "country foods".	Appendix 21-A	Chapter 21.3.1.1, 21.3.1.2, 21.3.2.2, 21.3.2.3, 21.4.1, 21.4.2.2, 21.4.3.2	-	
605			Aspects covered under this sub-section would include hunting, angling, traplines, and farming that may be affected by Project activities.	Appendix 21-A	Chapter 21.3.1.1, 21.3.1.2, 21.3.2.2, 21.3.2.3, 21.4.1, 21.4.2.2, 21.4.3.2, 18.5.1, 18.5.2, 18.5.3, 18.5.4, 18.5.5, 18.5.6	-	
606			The human health risks due to consumption of contaminated country foods (wild game, fish, berries, plants, etc.) will be assessed according to the tiered risk assessment methodology presented in Chapter 8 of Health Canada (2004).	Appendix 21-A	Chapter 21.4.1, 21.4.2.2, 21.4.3.2, 21.5.1.2, 21.5.2.2, 21.5.3.2, 21.5.3.5, 21.5.4.2, 21.5.5.2, 21.5.6	-	
607			Review of any relevant government data (i.e. hunting statistics) and surveys of the local population will be conducted to identify country food use in the Human Health Local and Regional Study Areas.		Chapter 21.4.2.2	-	
608	8.3.5	Assessment of Potential Effects and Proposed Mitigation	This sub-section will identify and evaluate potential human health risks related to predicted Project- induced effects to audible noise, air quality, country foods, and drinking water quality.	Appendix 21-C	Chapter 21.5	-	
609			Other potential human health risks will be evaluated, as appropriate and may include information such as perceived risk of consuming fish and wildlife located within and/or adjacent to the Project area.	-	Chapter 21.3, 21.5.2.2	-	
610			Appropriate mitigation measures and environmental management strategies will be identified and described to avoid, minimize, or mitigate potential adverse effects on human health during proposed Project construction, operations, and decommissioning.	-	Chapter 21.5.2, 21.5.3.5	Section 24.15	
611			Mitigation methods may include measures for ongoing communications with the public regarding potential public health risks.	-	Chapter 21.5.2, 21.5.3.5	-	
612	8.3.6	Potential Residual Effects and their Significance	This sub-section will identify and describe potential residual effects following implementation of mitigation measures and management strategies.	-	Chapter 21.5.3 to 21.5.6	-	

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	AIR	AIR Section Number and			Location of Relevant Informatio	n	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
613	8.4	Summary of Assessment of Potential Health Effects	This section of the Application will include a table summarizing completed assessments of potential effects to valued health components. An example of the type of table that may be provided in the Application can be seen in Table 8.1 of the AIR.	-	Chapter 21.5.3.5 (Table 21.5-12)	-	
614	9.	Cumulative Effects Assessment	Where residual effects on particular environmental, economic, social, heritage or health components are predicted, a Cumulative Effects Assessment (CEA) will be conducted.	-	Chapter 8.7.3 Chapter 9.6.3 Chapter 10.6.3 Chapter 11.6.3 Chapter 12.6 Chapter 13.6 Chapter 24.6 Chapter 15.6.3 Chapter 16.8.3 Chapter 17.6.3 Chapter 18.6 Chapter 19.6 Chapter 20.6.3 Chapter 21.6 Chapter 21.6 Chapter 22.5.3 Chapter 28, Table 28.4-1	-	The cumulative effects assessment requirements have been integrated into all chapters within Parts B and C of the Application. The methods used are described in Chapter 8. A summary of cumulative effects assessment is provided in Chapter 27.
615			Other existing, confirmed future and reasonably foreseeable projects/activities within the regional study area will be outlined.	-	Chapter 9 to 13, 15, 17 to 18, 20 to 21 Sections X.6.1, X.6.2 Chapter 14.6.1.2 to 14.6.1.4 Chapter 16.8.1 to 16.8.2 Chapter 19.6.1.3 Chapter 22.5.1.2, 22.5.1.3	-	
616			General effects on the environmental or social component of concern will be noted. These may include nearby forestry and mining activities or noise and air quality effects of traffic on roads (including access and logging roads).	-	Chapter 9 to 13, 15, 17 to 18, 20 to 21 Section X.6.2 Chapter 14.6.1.4 Chapter 16.8.2 Chapter 19.6.1.3 Chapter 22.5.2 Section 23.5	-	
617			The CEA may include but will not necessarily be limited to:	-	-	-	
618			Identification and discussion of particular VC	-	Chapter 9 to 15, 17 to 21  Section X.6.1.1  Chapter 16.8.1.1  Section 22.5.1.1  Section 23.5	-	

	AIR AIR Section Number and			Location of Relevant Informati	on	
ID#	Section Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
619		Description and discussion of residual effect (s)	-	Chapter 9 to 11, 15, 17	-	
				Section X.6.4		
				Chapter 12 to 13, 18, 20		
				Section X.6.2		
				Chapter 14.6.1.4		
				Chapter 16.8.4		
				Chapter 19.6.1.3		
				Chapter 21.6.2.5		
				Chapter 22.5.4.3Section 23.5		
620		Identification and description of other projects and activities to	-	Chapter 9 to 15, 17 to 20	-	
		consider		Section X.6.1.3		
		(i.e. mines, industrial, and commercial activities, and tourism in the		Chapter 16.8.1.3		
		region)		Chapter 21.6.2		
				Chapter 22.5.1.3		
				Section 23.5		
621		Discussion of the effect of other projects and activities on components	-	Chapter 9 to 11, 15, 17, 23	-	
				Section X.6.4		
				Chapter 12 to 13, 18, 20		
				Section X.6.2		
				Chapter 14.6.1.4		
				Chapter 16.8.4		
				Chapter 19.6.1.3		
				Chapter 21.6.2.5		
				Chapter 22.5.4.3Section 23.5		
622		Mitigation measures to address any cumulative effects, and	-	Chapter 9 to 11, 15, 17, 23	-	
				Section X.6.3		
				Chapter 12 to 13, 18, 20		
				Section X.6.2Chapter 14.6.1.4		
				Chapter 16.8.3		
				Chapter 19.6.1.3		
				Chapter 21.6.2.5		
				Chapter 22.5.3		
				Section 23.5		

	AIR	AIR Section Number and			Location of Relevant Informati	ion	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
623			An overall assessment of cumulative effects.	-	Chapter 8.7.3	-	
					Chapter 9.6.3		
					Chapter 10.6.3		
					Chapter 11.6.3		
					Chapter 12.6		
					Chapter 13.6		
					Chapter 24.6		
					Chapter 15.6.3		
					Chapter 16.8.3		
					Chapter 17.6.3		
					Chapter 18.6		
					Chapter 19.6		
					Chapter 20.6.3		
					Chapter 21.6		
					Chapter 22.5.3		
					Chapter 28, Table 28.4-1		
624	10.	Summary of Proposed	The Application will provide an overview of YMI's Environmental	-	Chapter 24.1 (all sections)	-	
		Environmental and	Management System (EMS) for the proposed Project.				
		Operational Management Plans					
625			An EMS is part of the overall corporate management system and will	_		Chapter 24.1.5	
020			include the organizational structure, planning activities, staff			Chapter 21.1.5	
			responsibilities, practices, procedures, and resources for developing,				
			implementing, reviewing, and maintaining environmental policies				
			associated with the Project.				
626			It will provide a consistent approach to environmental management	-		Chapter 24.1.5	
			through resource allocation, the assignment of responsibilities, and				
			ongoing evaluation of environmental practices, procedures, and processes.				
627			As part of the EMS program various Environmental Management Plans	-		Chapter 24.1.6	
			(EMPs) will be developed to address environmental and operational concerns in a consistent manner in the Application. This will be				
			accomplished through the allocation of resources, assignment of				
			responsibilities, and ongoing evaluation of practices, procedure, and				
			processes.				
628			The EMPs will detail the environmental practices and procedures to be	-		Chapter 24.1.6	
			applied, as appropriate, during the construction, operations, maintenance,				
			and closure of the Project, and where relevant, decommissioning. The				
			EMPs will include plans such as the following as deemed appropriate:				
629			Soil salvage and storage	-		Section 24.14	
630			Tailings containment area operating plan	-		Section 24.4, 24.6,	
						24.8, 24.9, 24.11, 24.13, 24.15	
			A* 19 11 4 4 1				
631			Air quality and dust control plan	-		Section 24.2	

AIR	AIR Section Number and			Location of Relevant Informati	on	
ID # Section		Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
632		Noise management plan	-		Section 24.10	
633		Wildlife management plan	-		Section 24.19	
634		Vegetation management plan including management of invasive species	-		Section 24.17	
635		Species at Risk management plan	-		Section 24.17, 24.19	
636		<ul> <li>Aquatic effects monitoring plan (e.g. water quality, sediment chemistry, benthic invertebrates, periphyton, fish tissue)</li> </ul>	-	Chapter 14.5.2.3 Chapter 24.6, 24.12	- Section 24.6, 24.12	
637		Reclamation and closure plan	-	Chapter 7	-	
638		<ul> <li>Surface water and stormwater management (including construction, operational, closure and post-closure, water management mitigation and contingencies, and monitoring) and erosion and sediment control plans</li> </ul>	-	Chapter 14.5.2.3 Chapter 24.11, 24.13 Chapter 7.6.5, 7.6.10, 7.12.3, 7.12.6	- Section 24.13 -	
639		Acid rock drainage / metal leaching management plan that incorporates prediction, prevention, management, and monitoring	-		Section 24.9	
640		Groundwater monitoring plan	-		Section 24.8	
641		Fish habitat compensation planning and follow-up monitoring	Appendix 14-E		Chapter 24.6, 24.12, 24.16-	
642		Wildlife habitat compensation planning	-		Section 24.19	
643		Materials handling and management plan	-		Section 24.18	
644		Construction waste and hazardous waste management plans	-	Chapter 24.7, 24.18	Section 24.7, 24.18	
645		Explosives handling plan	-	Chapter 14.5.2.3 Chapter 24.5	- Section 24.5	
646		Clearing around wildlife sensitivities plan	-		Section 24.17 Section 24.19	
647		Processing plant environmental controls plan	Appendix 5-A (Section 13, Section 17)	Chapter 5.9.2 Chapter 9 Chapter 24.4		
648		Accidents and malfunctions planning including emergency and spill response and contaminated site clean-up plan	-		Section 24.15	
649		Environmental supervision during works in sensitive areas, such any works in riparian areas, and	-	Chapter 24.1	Section 24.6.3.1, 24.7.3.7, 24.14.3.1, 24.16, 24.17.3, 24.19.3.2	
650		<ul> <li>Archaeological monitoring in high potential areas where a site has not been found (under <i>Heritage Conservation Act</i> permit) to allow rapid intervention by the archaeologist.</li> </ul>	-		Section 24.3	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
651			Objectives, methods, and critical thresholds (triggers) for management response will be included for each program/contingency plan.	-		Chapter 24.2 to 24.11, 24.13 to 24.19 Section 24.X.1, 24.X.2 Chapter 24.12.2, 24.12.6	
652			The dataset will continue to grow and be re-evaluated, where required (i.e. assessment of seasonal changes in groundwater levels).	-		Chapter 24.2 to 24.11, 24.13 to 24.19 Section 24.X.4 Chapter 24.12.8	
653			This section of the Application will also describe proposed training programs and/or environmental procedures manuals that may be developed for site staff.	-		Chapter 24.2 to 24.19 Section 24.X.3	
654	11.	Compliance Reporting	The Application will provide a detailed description of anticipated reporting including the type and frequency of reports to be submitted to the EAO and/or other regulatory federal or provincial agencies, as required.	-		Chapter 24.2.5, 24.3.5, 24.4.5, 24.5.5, 24.6.5, 24.7.5, 24.8.6, 24.9.5, 24.10.5, 24.11.5, 24.12.9, 24.13.5, 24.14.5, 24.15.5, 24.16.5, 24.17.5, 24.18.5, 24.19.5-	
655			The anticipated reporting structure will be consistent with approved EMPs, monitoring plans, or other commitments.	-		Chapter 24.2.5, 24.3.5, 24.4.5, 24.5.5, 24.6.5, 24.7.5, 24.8.6, 24.9.5, 24.10.5, 24.11.5, 24.12.9, 24.13.5, 24.14.5, 24.15.5, 24.16.5, 24.17.5, 24.18.5, 24.19.5	
656	12.	First Nations	This section of the Application will include an assessment of the potential effects of the Project on First Nations activities related to aboriginal rights, title, and other interests raised by First Nations regarding environmental, economic, social, heritage, and health effects.		Chapter 17.5.2, 17.5.4 Chapter 20.5.1, 20.5.3 Chapter 21.5.1, 21.5.3 Chapter 22.4.2, 22.4.4 Chapter 23.5 to 23.7	-	
657			It will also outline the potential effects and cumulative impacts the Project may pose on nearby First Nations communities.	-	Chapter 17.6 Chapter 20.6 Chapter 21.6 Chapter 22.5 Chapter 23.5.4, 23.5.5, 23.5.6, 23.6, 23.7	-	
658	12.1	Summary and Overview	The Application will include details pertaining to First Nations that could potentially become impacted by the activities of the Project.	-	Chapter 23.1, 23.2, 23.3	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
659			If First Nations have been identified as being impacted by the Project, maps of the asserted and/or traditional territory will be included, along with possible information regarding, but not limited to: ethnography, language, land-use setting and planning, governance, economy, and reserves.	-	Chapter 22.1, 22.3 (Figures 22.1-1, 22.1-2, 22.1-3, 22.1-4) Chapter 23.1, 23.3.1 to 23.3.6, 23.5.1 to 23.7 (Figures 23.1-1, 23.1-2, 23.1-3)	-	
660			Furthermore, a "Strength of Claim" analysis will be completed by the Province and will be reflected in this section of the EA, as applicable.	Appendix 23-A	Chapter 23.1	-	
661			The Application will identify and describe the First Nations identified as having an actual or potential interest in the Project and those potentially affected by the Project, in consultation with the EAO.	-	Chapter 21.3.1, 21.4.1 Chapter 22.1.1, 22.3.3 Chapter 23.3, 23.4.1, 23.4.4	-	
662			It will explain why the listed First Nations communities were identified and included in consultation activities.	-	Chapter 23.1.1, 23.1.2, 23.3, 23.4.1, 23.4.2, 23.4.3	-	
663			The nature of the expressed interests, if such information is provided by First Nations to YMI on the timeline set out by the EAO, will be described in Section 11.6 and Section 12.0.	-	Chapter 3.5 Chapter 23.4.1 to 23.4.4	-	
664			The Application will describe the surrounding traditional territory of the Secwepemc (Shuswap) Nation.	-	Chapter 23.2.1, 23.3.1, 23.5.3	-	
665	12.2	Aboriginal Rights	This section will focus on aboriginal rights.	-	Chapter 23.1.1, 23.5, 23.7	-	
666			It will focus on past, present and anticipated customs, practices, and future uses of the Project area by aboriginal groups.	-	Chapter 23.1.1, 23.5, 23.6, 23.7	-	
667			Identify specific asserted aboriginal rights and titles.	-	Chapter 23.1.1, 23.3.1 to 23.3.6	-	
668	12.3	Socio-Economic Setting	This section of the Application will focus on the socio-economic setting of the four First Nations that could potentially become impacted, both positively and/or negatively, by the activities of the Project.	-	Chapter 17.4.1.5 Chapter 22.3 Chapter 23.3	-	
669			The Application will include information pertaining to their social situation and discuss topics such as population, demographics, language, cultural practices, traditional learning, and infrastructure.	Appendix 17-A (Table A.1)	Chapter 17.4.3.1, 17.3.3.4, 17.4.3.5, 17.4.3.6, 17.4.3.8, 17.4.3.9, 17.4.3.12, 17.4.3.13 Chapter 22.3.3.1 to 22.3.3.4	-	
670			It will also include information pertaining to their economic situation such as development opportunities, employment, labour force, food source, and general economic setting.	Appendix 17-A (Table A.1)	Chapter 17.4.3.2, 17.4.3.3, 17.4.3.7, 17.4.3.10, 17.4.3.11 Chapter 22.3.3.1 to 22.3.3.4	-	
671	12.4	Traditional Knowledge	This section of the Application will include a discussion regarding Traditional Knowledge and Traditional Land Use related to the Project area.	-	Chapter 23.4.3, 23.5.4, 23.5.5, 23.5.6, 23.6.2.2, 23.7	-	
672			Discuss the current use of lands and resources for traditional purposes by local First Nations.	Appendix 21-A	Chapter 22.3.3 Chapter 23.3 (all sections)	-	
673			Potential impacts of the Project on traditional use and asserted rights will be discussed.	-	Chapter 22.4.3, 22.5.3, 22.5.4.3 (Table 22.5-2, 22.5-6, 22.6-2, 22.6-4, 22.7-1) Chapter 23.5.4 to 23.7	-	
674			Appropriate mitigation measures to avoid or reduce the identified potential impacts will be included in the Application.	-	Chapter 23.5.4 to 23.7 (Table 23.7-1)	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
675	12.5	Other Aboriginal Interests	The aboriginal interests regarding potential environmental, heritage and health effects that may result due to Project development will be detailed in this sub-section of the Application.	-	Chapter 23.4, 23.5.5, 23.5.6, 23.6.1, 23.6.2	-	
676			Include a summary of how these concerns/interests have been addressed.	-	Chapter 23.5.4.1 to 23.5.4.4, 23.5.5.1 to 23.5.5.3, 23.5.6.1 23.7 (Table 23.5-2) (Table 23.7-1)	-	
677	12.6	Aboriginal Consultation	This chapter of the Application will provide a summary of past and planned aboriginal consultation activities.	Appendix 3-E, 3-F, 3-G, 3-H	Chapter 3.5 Chapter 23.4 Chapter 28.3	-	
678			Key aboriginal issues of relevance to the EA and the responses to these issues will be detailed.	Appendix 3-E, 3- F, 3-G, 3-H	Chapter 3.5.1 to 3.5.3, and 3.5.1.10, 3.5.2, 3.5.3 Chapter 23.4.4, 23.7	-	
679			The issues included in this section will reflect those recorded in the tracking table that will be included in Section 3.1 of the Application and posted on the EAO website.	- Appendix 3-E	Chapter 3.5 Chapter 23.4.4	-	
680			YMI is committed to continuing to work closely with local First Nations to develop working agreements, such as a Memorandum of Understanding (MOU) and/or economic and Impact Benefit Agreements (IBAs).	-	Chapter 3.5.1.4 Chapter 23.3.1, 23.3.2, 23.3.3, 23.3.4, 23.3.5, 23.4.1, 23.4.4	-	
681			Consultation with First Nations will be ongoing for the duration of the Harper Creek Project and will be reported in the Application.	-	Chapter 3.5.1.10 and 3.5.3 Chapter 23.4.4, Chapter 28.3	-	
682			The consultation tracking form will be appended to the Application and will summarize consultation activities since 2006.	Appendix 3-F (Table 3-F1 to 3-F5) Appendix 23-A	Chapter 3.5.2 Chapter 23.4	-	
683	13.	Summary of Potential Effects on Aboriginal Activities and Accommodation Measures	Accommodation measures will be discussed in this section	-	Chapter 23.7 (Table 23.7-1) Chapter 28.6.3.15	-	
684			Include topics such as design considerations, mitigation measures, and specific commitments which address potential effects of the matters identified in earlier sections. This information will be depicted in table format similar to that shown in Table 12.1 of the AIR.	-	Chapter 23 Section 23.5.4, 23.5.5, 23.5.6, 23.6.1, 23.6.2, 23.7 (Table 23.7-1); Chapter 27	-	
685	14.		Part D of the Application will address any additional comprehensive study assessment requirements for the EA in addition to those addressed under Part B: Assessment of Project Effects, Mitigation, and Significance of Residual Effects of the Application.	-	Chapters 12 and 15 Section 12.6.3, 15.6.7	-	
686			The assessment of potential effects that will be provided in Part B: Assessment of Project Effects, Mitigation, and Significance of Residual Effects of the Application will be undertaken consistent with section 16(1) of the CEAA, which requires an assessment of the "environmental effects" of the proposed Project. "Environmental effects" are defined in section 2(1) of the CEAA as:	-	Chapters 9 to 18, and 20 to 23 Sections 9.5, 10.5, 11.5, 12.5, 13.5, 14.5, 15.5, 16.6, 17.5, 18.5, 20.5, 21.5, 22.4, 23.5	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
687			I. Any change that the Project may cause in the environment, including any change it may cause to a listed wildlife species, its critical habitat or the residences of individuals of that species, as those terms are defined in subsection 2(1) of SARA	-	Chapter 9 to 16 Sections 9.5, 9.6, 9.7, 10.5, 10.6, 10.7, 11.5, 11.6, 11.7, 12.5, 12.6, 12.7, 13.5, 13.6, 13.7, 14.5, 14.6, 14.7, 15.5, 15.6, 15.7, 16.5, 16.6, 16.7	-	
688			<ul> <li>II. Any effect of any change referred to in paragraph (I) on: <ol> <li>Health and socio-economic conditions</li> <li>Physical and heritage</li> <li>The current use of lands and resources for traditional purposes by aboriginal persons, or</li> <li>Any structure, site, or thing that is of historical, archaeological, paleontological or architectural significance.</li> </ol> </li> </ul>	Appendices 17-A, 21-A, and 23-B	Chapter 17.5.4, 18.5.3, 20.5.3, 21.5.3, 22.4.4, 22.4.2.2, Chapter 23.5.4, 23.5.5, 23.5.6, 23.6.1, 23.6.2		
689			III. Any change to the Project that may be caused by the environment, whether any such change or effect occurs within or outside Canada.	-	Chapters 9 to 16, and 22 Sections 9.6.2, 10.6.2, 11.6.2, 12.6.2, 13.6.2, 14.6.1.4, 15.6.2, 16.8.2 Chapter 22.5.2 Chapter 27	-	
690			This Part of the Application will identify and assess the federal assessment requirements pertaining to potential effects of the environment on the proposed Project, as referenced in subsection (III) of the definition of "environmental effect", and potential cumulative environmental effects.	-	Chapter 27.1 to 27.6	-	
691	14.1	Effects of the Environment on the Project	The Application will discuss environmental factors that may potentially affect the proposed Project and attempt to predict the impacts of those environmental factors.	-	Chapter 27.1 to 27.6	-	
692			The assessment will be consistent with Section 2(1)(c) of CEAA which defines "environmental effects", in part, as "any change to the proposed Project that may be caused by the environment, whether any such change or effect occurs within or outside Canada."	-	Chapter 28.1	-	
693			The range of climatic conditions that could potentially impact the Project includes extreme weather events, wet, dry, and normal periods of precipitation, extreme temperature, freeze-thaw cycles, and climate change.	-	Chapter 27.2, 27.6	-	
694			The Application will discuss how trends and extremes in current climate, seismic activity, and other natural hazards such as fire and floods could impact Project related infrastructure such as the pit and tailings facility.	-	Chapter 27.3 to 27.5	-	
695			Where possible, measures to mitigate these effects will be identified.	-	Chapter 27.2.2.3, 27.2.3.2, 27.3.2, 27.4.2, 27.5.2.2, 27.5.3.2, 27.6.2, 27.6.3.2	-	
696			Potential effects of any contingency plans proposed to minimize effects of the environment on the proposed Project will be discussed.	-	Chapter 27.2.2.4, 27.2.3.3, 27.3.2.1, 27.4.2.1, 27.5.2.3, 27.5.3.2, 27.6.3.2	-	

	AIR	AIR Section Number and			Location of Relevant Information	n	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
697	14.2	Accidents and Malfunctions	If applicable, the Application will address potential accidents and malfunctions (and an assessment of potential effects to the environment as a result of them) during the construction, operation, and decommissioning phases of the Project. This may include:	-	Chapter 26.1 to 26.8 (Table 26.3-1)Chapter 28.7	-	
698			<ul> <li>Identification of potential accidents and malfunctions that could lead to environmental, health, economic, social, and/or heritage impacts on- site and during transport of concentrate (e.g., tailings dam failure, fuel spills, concentrate spills, settling pond water release, etc.)</li> </ul>	-	Chapter 26.3.1, 26.4 to 26.7	-	
699			<ul> <li>An assessment of potential failure hazards (including natural hazards such as landslides and seismic activity) and consequences for Project components and infrastructure</li> </ul>	-	Chapter 26.6.1, 26.7.2 Chapter 27.5.2, 27.5.3	-	
700			<ul> <li>A summary of proposed groundwater protection measures from spills and leaks that may occur on-site or during the transport of concentrate</li> </ul>	-	Chapter 26.3.2.4 (Table 26.3-3) Chapter 26.4.1.3, 26.4.3.3	-	
701			A list of on-site storage locations for chemicals and reagents anticipated for use on site (e.g. in the mill circuits and process plant) along with the estimated maximum volume and concentration of the reagents	-	Chapter 26.4.3 (Table 26.4-1)	-	
702			<ul> <li>A description of on-site containment features, such as concrete pads and dykes, and detection systems used for early warning and containment of spills</li> </ul>	-	Chapter 26.4.1.2, 26.4.2.2, 26.6.1.2	-	
703			<ul> <li>A summary of potential accidents and/or malfunctions associate with each stage of the Project from routine activities to other activities such as blasting</li> </ul>	-	Chapter 26.3.1.4 (Table 26.3-2) Chapter 26.5.1, 26.5.2	-	
704			<ul> <li>The rationale for each selected storage location and measures that may be taken to protect the immediate environment from spills and/or leaks</li> </ul>	-	Chapter 26.4 (Table 26.4-1)	-	
705			The likely environmental, economic, social, heritage, or health effects that could result from these occurrences, and	-	Chapter 26.4.1.3, 26.4.2.3, 26.4.3.3, 26.4.4.3, 26.5.1.3, 26.5.2.3, 26.6.1.3, 26.7.1.3, 26.7.2.2	-	
706			<ul> <li>Proposed mitigation including a commitment to appropriate environmental management/ contingency plans and on-site emergency response procedures.</li> </ul>	-	Chapter 26.3.2.2, 26.4.1.2, 26.4.2.2, 26.4.3.2, 26.4.4.2, 26.5.1.2, 26.5.2.2, 26.6.1.2, 26.7.1.2, 26.7.2.1	Chapter 24.4	
707	14.3.1	Alternatives to the Proposed Project	"Alternatives to" the proposed Project (i.e., functionally different ways to meet the Project need and achieve the Project purpose) will be identified by the proponent and evaluated in accordance with Section 16(1)(e) of CEAA based on environmental, engineering, and socio-economic considerations.	<u>-</u>	Chapter 4.3	-	
708			This sub- section will describe technically and economically feasible "alternatives to" the proposed Project that are consistent with CEA Agency's Operational Policy Statement OP2-EPO/2 (1998).	-	Chapter 4.3.1 to 4.3.4 (Table 4.3-1)	-	
709	14.3.2	Alternative Means of Carrying Out the Project	This section of the Application will describe alternative means of carrying out the Project that are technically and economically feasible.	-	Chapter 4.4	-	

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
710			Each alternative presented will include the identification of potential environmental effects of any such alternative means.	-	Chapter 4.4.3.3, 4.4.4.4, 4.4.6.3,	-	As per the methodology outlined in Chapter 4, the environmental effects of alternatives are only considered for those alternatives which are technically and economically feasible.
711			Preferred alternatives will include a rationale for their selection.	-	Chapter 4.4.2.4, 4.4.3.4, 4.4.4.5, 4.4.5.4, 4.4.6.4, 4.4.7.4, 4.4.8.4, 4.4.9.4	-	
712			The alternative means assessment may include, but will not necessarily be limited to, the following:	-		-	
713			<ul> <li>Locations of various mine components / facilities (e.g., tailings facility, waste rock storage, etc.)</li> </ul>	-	Chapter 4.4.2, 4.4.3, 4.4.4, 4.4.9	-	
714			Processing methods	-	Chapter 4.4.5	-	
715			Concentrate movement, storage, and transportation	-	Chapter 4.4.6	-	
716			Access corridors	-	Chapter 4.4.7	-	
717			Employee accommodations (e.g., on-site versus off-site), and	-	Chapter 4.4.8	-	
718			<ul> <li>Waste rock and tailings management, including management of ML/ARD (Environment Canada 2011).</li> </ul>	-	Chapter 4.4.3, 4.4.9	-	
719			Appropriate figures will be included to illustrate the locations of alternate locations evaluated as well as the preferred location selected.	-	Chapter 4.4.1 to 4.4.9 (Figure 4.4-1 to 4.4-4)	-	
720			It will also detail possible alternative means of carrying out the Project, if needed.	-	Chapter 4.4.2.2, 4.4.3.2, 4.4.4.2, 4.4.5.2, 4.4.6.2, 4.4.7.2, 4.4.8.2, 4.4.9.2	-	
721			Include the reasons for selecting the preferred option, an analysis of the alternative means of carrying out the Project that are technically and economically feasible and the associated environmental effects of the alternative option, if associated effects are anticipated.	-	Chapter 4 (all sections), 4.4.10 (Table 4.4-9)	-	
722	14.4	Follow-up Programs	The Application will describe the follow-up programs and its associated requirements.	-	Chapter 28.5.4	-	
723			The Application will include a summary table of proposed commitments such as mitigation, emergency response, environmental management plan activities, design features, commitments to a follow-up plan and commitments to meeting specific environmental, health, or social standards/guidelines.	-	Chapter 27.2.2.3 (Table 27.2-3) Chapter 27.2.3.2 (Table 27.2-6) Chapter 27.3.2 (Table 27.3-5)	-	
724			The follow-up plan/program will include an assessment of whether or not the monitoring conducted during construction, operations, and decommissioning was appropriate to measure potential effects and whether or not the effects predicted in the environmental assessment were valid.	-	Chapter 28.5.4	-	
725			If applicable, follow up program(s) will be completed in accordance with the CEAA "Operational Policy Statement: Follow-up Programs documents".	-	Chapter 28.5.4		

	AIR	AIR Section Number and			Location of Relevant Information	on	
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
726	14.5	Capacity of Renewable Resources	This section will summarize the results of an analysis of the capacity of renewable resources to meet the needs of the present and those of the future where these resources are likely to be significantly affected by the Project.	-	Chapter 25.1 to 25.5	-	
727	15.	Summary of Residual Effects	The Application will summarize the effects of the Project, mitigation measures, and commitments.	-	Chapters 9 to 15, 18, 20 to 22 Sections X.5.6; Chapter 16.6.14 Chapter 17.5.7 Chapter 19.5.10 Chapter 22.4.7 Chapter 27.2.2.3, 27.2.3.2, 27.3.2, 27.4.2, 27.5.2.2, 27.5.3.2 Chapter 28.4.1 to 28.4.14 (Table 28.4-1), Chapter 28.5	-	
728			The Application will include a conclusion from the assessment of effects and cross reference the findings with the section on the assessment of the Project impacts, mitigation requirements, and residual effects.	-	Chapter 9 to 15, 17 to 22 Sections X.7 Chapter 16.9 Chapter 28.4.1 to 28.4.14 (Table 28.4-1), Chapter 28.5	-	
729			The following table will be used to summarize the information for each environmental, economic, social, heritage and/or health effect that cannot be completely avoided or mitigated through the re-design or relocation of the Project.	-	Chapter 28, Table 28.4-1	-	
730			An example of a table that may be provided in the Application is provided in Table 14.1 of the AIR. (Final significance determination rests with EAO and federal responsible authorities.)	-	Chapter 28.4 (Table 28.4-1)	-	
731	16.	Summary of Commitments	This section of the Application will summarize YMI's commitment to minimizing the potential for the Project to generate adverse environmental, economic, social, heritage or health effects.	-	Chapter 28.8	-	
732			The summary will identify the specific commitments YMI will implement, which will become a schedule of the Environmental Assessment Certificate, if a Certificate is issued, and will inform subsequent federal decisions.	-	Chapter 28.8 (Table 28.8-1)	-	
733			These specific commitments will be summarized in the Application through a table similar to the one presented in Table 15.1 of the AIR.	-	Chapter 28.8 (Table 28.8-1)	-	
734	17.	Conclusion	This Chapter will summarize YMI's understanding of the BC EA process (and if required, the harmonized provincial/federal process) in promoting sustainable development while minimizing effects to the environmental, economic, social, heritage and health valued components.	-	Chapter 28.9	-	
735			A statement describing how the Project aligns with the goal of the BC EA process (and CEAA process, if required) will be included.	-	Chapter 28.9	-	
736			YMI will state their request for an Environmental Assessment Certificate for the Project and a federal Environmental Assessment, if needed, and subsequent permitting/authorization processes prior to proceeding with the proposed Project construction, operation, maintenance and decommissioning.	-	Chapter 28.9	-	

	AIR	AIR Section Number and	Lo	ocation of Relevant Informa	ation		
ID#	Section	Title	Description of Section and/or Sub-Section in AIR	Appendix	Application	Management Plan	Comments
737	18.	References	The Application will include a complete list of references cited.	-	Chapter 1 to 28 All References	-	
738	19.	Appendices	This section of the Application will be used to provide applicable	All Appendices	Chapter 1 to 28	-	
			appendices.		-		