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21 CONCLUSION

The Application for an Environmental Assessment Certificate/Environmental Impact Statement (Application) represents the application made by New Gold (the Proponent) pursuant to the BC *Environmental Assessment Act* (2002) and *Canadian Environmental Assessment Act*, *2012* for approval to proceed to permitting for the proposed Blackwater Gold Project (the Project).

21.1 Project Overview

The Proponent proposes to develop an open pit gold and silver mine, 110 kilometres (km) southwest of Vanderhoof in central British Columbia (BC). Based on current resource estimates, approximately 361 million tonnes (Mt) of ore will be mined and processed at a rate of 60,000 tonnes per day (t/d) (22 million tonnes per year (Mt/y)).

Project components include ore processing facilities, a 140 km transmission line, fresh water supply system, airstrip and an access road that will connect to the existing Kluskus Forest Service Road (FSR), which will be the main access route to the mine site.

Section 2.2 provides a detailed description of project facilities and activities at each phase (**Table 2.2.6-2** and **Table 2.2.6-3**). **Figure 2.2.2-2** illustrates the layout of the Project's infrastructure components at the end of the operation phase.

Construction of the Project is expected to take two years, and the operations phase is expected to be 17 years. The closure phase will start once the operations are finished, and will take approximately 18 years, which is the period required to flood the open pit. The post-closure phase will commence once closure activities are completed.

21.2 Project Benefits

The Project will make a major contribution to social and economic well-being in BC, especially in central BC, where Project spending on labour, goods, and services will provide opportunities for regional residents, and will bring additional workers and their families into the area. By providing well-paying jobs, reducing local unemployment levels, purchasing goods and services from regional businesses, and contributing to economic and population growth, the Project will improve economic and community stability, and offset some of the employment losses that have recently occurred in the region due to declines in the forest industry. The District of Vanderhoof, Fraser Lake and the City of Prince George will be the major beneficiaries of the Project, although Project benefits will spill over into other communities, both Aboriginal and non-Aboriginal, within central BC.

Economic and social benefits associated with the Project are summarized below:

- Project life. The Project will generate approximately 24 years of economic activity, including two years of construction activity, 17 years of operations, and five years of closure activities, although monitoring will continue over an extended period.

- Capital cost. The capital cost of construction is estimated at $1.814 billion over the two-year construction period, with approximately 88% of construction expenditures being made within BC ($1.294 billion, excluding contingencies), including $398 million within central BC.
- Construction phase employment. The construction phase will create an estimated 3,480 person years (PYs) of direct employment at the mine, with 70% estimated for BC residents (3,435 PYs), including an estimated 20% for regional residents (485 PYs). At peak, the Project will employ about 1,500 workers at the site. Approximately 20% of construction-related employment will be hired directly by the Proponent; contractors will supply the other 80% of the construction workforce.
- Operations phase employment. During operations, the Project will employ about 495 people, with 80% of these (396) being BC residents, including 320 residents of central BC. These new jobs would at least partially offset the loss of basic jobs in central BC that occurred between 2006 and 2011, and will help maintain and enhance economic diversity and decrease dependency on the forestry sector.
- Annual operating expenditures. Project expenditures on goods and services during operations will average $243 million annually, with $152 million being made within BC, including $75 million within the region. The purchases will generate 405 PYs of indirect employment in BC, including 200 PYs for regional residents.
- Ongoing capital expenditures. Approximately $572 million in sustaining capital purchases will be made over the operating life of the Project, and this will create another 2,200 PYs of indirect employment in BC. Of this, 17% ($98 million) will be purchased from businesses in central BC, resulting in 375 PYs of employment.
- Provincial revenues. The Project will generate about $43.3 million in provincial revenues during construction through income taxes and taxes on products, and approximately $21 million annually during operations. Regional and municipal revenues. Annual revenues (direct, indirect, and induced) accruing to local and regional governments will total about $13 million during construction, and about $4 million per year during operations, including about $2.3 million per year in property taxes.

21.3 Alignment with Goals of the BC Environmental Assessment Process

The goal of the Environmental Assessment (EA) process is to promote sustainable development while minimizing adverse environmental, economic, social, heritage, and health effects. The EA process provides opportunities for the public and stakeholders to review and comment on a proposed project. The Proponent has endeavoured to satisfy the goals of the process by using the feedback provided during consultations on the Project to refine the Project layout and design to minimize the adverse effects of the Project and maximize the potential benefits. A number of key changes were made to the Project design as a result of the pre-Application process. In response to concerns raised by Aboriginal groups, government agencies, local governments and the public during the review, the following changes have been made to the Project design:

- Selecting a mine access road to avoid the Tweedsmuir-Entiako caribou herd wintering ground rather than upgrading the existing exploration road which cuts through part of the winter range.
- Routing the transmission line around the Davidson Creek ranch area to avoid private property.
- Adjusting the routing of the transmission line to minimize crossing the Stellako River Wildlife Management Area.
- Eliminating two Tailing Storage Facility alternatives in the Blackwater River watershed.
- Maximizing use of existing road right-of-ways to access the transmission line.
- Rejecting the southern access option from Anahim Lake to Blackwater due to the sensitivity of the environment along this corridor, potential effects on the Blackwater River and Grease Trail, and potential that the FSR would be upgraded to highway status with a connection to the Kluskus FSR.

Further, mine waste will be managed in a manner that protects water resources by avoiding surface water discharges during operations and closure phases and by co-disposing potentially acid-generating (PAG) waste rock under water with tailings in the Tailings Storage Facility (TSF) in order to achieve water quality objectives during all project phases.

21.4 Summary of Assessment Methods and Residual Effects and Mitigation

In the Application/EIS, the Proponent has reported the findings of its assessment with respect to the potential effects of the Project on the Project's baseline environmental, economic, social, economic, and heritage setting. The assessments have been broadly scoped and followed the effects assessment methodology that is outlined in **Section 4**.

The effects assessments consider the feedback provided during the pre-Application stage of the process by review participants including potentially affected First Nations, federal and provincial government agencies, local governments and the public. The Proponent initiated consultations in 2012, and led or participated in over one hundred meetings with the public, government agencies and local governments, community events, and open houses. During consultations, the Proponent provided information on the Project and responded to questions. Consultations informed the selection of Valued Components (VCs) of the effects assessment. Forty VCs have been assessed in the Application/EIS (**Table 21.4-1**).

Summaries of the effects assessments for environmental, economic, social, heritage, and health VCs are provided in **Sections 5.5**, **6.3**, **7.3**, **8.3**, and **9.3**. Based on the effects assessment, no significant residual effects are anticipated once proposed mitigation measures are implemented as identified in the assessment (**Table 21.4-2**). **Table 21.4-2** also shows VCs that were progressed to CEA.

Table 21.4-1: Valued Components by Pillar

Pillar	Valued Component
Environment	Noise and Vibration
	Climate Change
	Air Quality
	Surface Water Flow
	Surface Water Quality
	Sediment Quality
	Groundwater Flow
	Groundwater Quality
	Wetlands
	Fish Habitat
	Fish
	Physiography and Topography
	Surficial Geology and Soil Cover
	Soil Quality
	Ecosystem Composition
	Plant Species and Ecosystems at Risk
	Amphibians
	Water Birds
	Forest and Grassland Birds
	Moose
	Caribou
	Grizzly Bears
	Furbearers
	Bats
	Invertebrates
Economic	Provincial Economy
	Regional and Local Employment and Business
	Regional and Local Government Finance
Social	Demographics
	Regional and Community Infrastructure
	Regional and Local Services
	Family and Community Well-being
	Non-traditional Land Use
	Current Land and Resource Use for Traditional Purposes
	Visual Resources
Heritage	Archaeological Sites
	Historic Heritage Sites
	Paleontological Resources
Health	Environmental Exposures
	Worker Health and Safety

Table 21.4-2: Summary of Project Residual and Cumulative Effects and Mitigation Measures

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Atmospheric					
Noise and Vibration (Section 5.2.2)					
Noise above baseline	Mine site	C; O; CL	Operate and maintain noise abatement systems on equipment and facilities. Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Noise and Vibration Management Measures (**Section 5.2.2**)	Not Significant (minor)	n/a: No other present or future projects or activities emitting noise/vibration will overlap in time and space with the Project; therefore, no CEA is required.
	Offsite infrastructure	C; O; CL		Not Significant (minor) (C; CL) Not Significant (negligible) (O)	
Climate Change (Section 5.2.3)					
Production of GHG emissions	All	C; O; CL; PC	Purchase and maintain energy efficient equipment. Implement energy management programs. Adhere to the following EMP: • Air Quality and Emissions Management Plan (AQEMP) (**Section 12.2.1.18.4.9**) • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**)	Not Significant (negligible)	n/a: A CEA for climate change has not been undertaken, as adverse residual effects of the Project are determined to be Non-Significant (negligible).
Air Quality (Section 5.2.4)					
Emissions of assessed pollutants	All	C; O; CL; PC	Control dust through road maintenance including watering. Operate and maintain emission control equipment as per manufacturer's requirements (e.g. refuse incinerator). Adhere to the following EMP: • Air Quality and Emissions Management Plan (AQEMP) (**Section 12.2.1.18.4.9**)	Not Significant (minor)	Not Significant (minor)

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			• Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**)		
			Aquatic		
Surface Water Flow (Section 5.3.2)					
Davidson Creek (WMN 1-DC) - Decrease in mean annual, peak and low surface water flow	All	C; O; CL; PC	Maintain IFN in Davidson Creek by pumping water from Tatelkuz Lake. Adhere to the following EMP: • Mine Waste Management Plan (MWMP) (**Section 12.2.1.18.4.17**) • Mine Water Management Plan (MWAMP) (**Section 12.2.1.18.4.18**) Discharge TSF supernatant and seepage to restore flows in Davidson Creek. (PC)	Not Significant (moderate) (C; O; CL) Not Significant (minor) (PC)	n/a: When compared to the potential effect of current and future agricultural, forestry, and mineral exploration activities in the Aquatics RSA, the Project effects on surface water flow are expected not to be measurable and therefore negligible.
Creek 705 (WMN 1-705) - Increase in mean annual, peak and low surface water flow	All	C; O; CL; PC	No mine infrastructure within Creek 705 catchment. Reverse flow in Lake 01682LNRS and Reach 12 of Davidson Creek into Lake 01538UEUT (from Davidson Creek to Creek 705).	Not Significant (moderate)	
Surface water flow Creek 661 (WMN 1-661) - Decrease in mean annual, peak and low surface water flow	All	O; CL; PC	Minimize mine infrastructure in Creek 661 catchment. Adhere to the following EMP: • Mine Water Management Plan (MWAMP) (**Section 12.2.1.18.4.18**) Discharge runoff and seepage from East Dump to restore flows in Creek 661. (PC)	Not Significant (minor) (O) Not Significant (moderate) (CL; PC)	
Surface water flow Chedakuz Creek (WN H5) - Decrease in mean annual and low surface water flow	All	O; CL; PC	Add flow to Davidson Creek from reservoir during low flow conditions to reduce the impact. Adhere to the following EMP: • Mine Waste Management Plan (MWMP) (**Section 12.2.1.18.4.17**)	Not Significant (moderate)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			• Mine Water Management Plan (MWAMP) (**Section 12.2.1.18.4.18**) Discharge TSF supernatant and seepage to restore flows in Davidson and Chedakuz Creeks.		
Surface water flow Tatelkuz Lake	All	O; CL	Adhere to the following EMP: • Mine Water Management Plan (MWAMP) (**Section 12.2.1.18.4.18**)	Not Significant (negligible)	
Surface Water Quality (Section 5.3.3)					
Potential exceedances of water quality guidelines, parameter-specific - sulphate	All	PC	Construct power line, water supply pipeline, new road alignment, and airstrip according to BMPs. Implement erosion and sediment control plan during construction phase. No surface water discharged from the TSF, and all site contact surface water captured during operations and closure phases. Construct wetlands in Pond C, Pond D, ECD and water reservoir during the closure period and to polish seepage from the TSF. Minimize seepage release from mine facilities. Adhere to the following EMP: • Water Quality and Liquid Discharges Management Plan (WQLDMP) (**Section 12.2.1.18.4.10**) • Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4.1**) • Mine Water Management Plan (MWAMP) (**Section 12.2.1.18.4.18**)	Not Significant (minor)	Not Significant (minor)

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Sediment Quality (Section 5.3.4)					
Potential exceedances of sediment guidelines (which are not presently above those guidelines), parameter-specific.	All	PC	Limit sediment export during all phases by implementing erosion and sediment control plan during construction and no surface water discharge during operations and closure phases. Adhere to the following EMP: • Water Quality and Liquid Discharges Management Plan (WQLDMP) (**Section 12.2.1.18.4.10**) • Sediment and Erosion Control Plan (SECP) (Sec**tion 12.2.1.18.4.1**)	Not Significant (minor)	n/a: BMPs will limit sediment export during off-site construction and the potential increase in erosion will be managed through BMPs. Road dust from traffic, if found to be significant, will be controlled through road watering or other measures in cooperation with other principal road users. Thus, there no cumulative effects from the Project and other sources are expected.
Groundwater Quantity (Section 5.3.5)					
Very localized changes in groundwater flow, and are TSF-specific.	All	C; O; CL; PC	Cluster mine site components to reduce footprint. Establish seepage collection and pump back systems (e.g. ECD). Construct TSF dam cut-off wall. Establish water reservoir and Tatelkuz Lake pumping system to maintain surface and groundwater flows in Davidson Creek. Adhere to the following EMP: • Mine Water Management Plan (MWAMP) (**Section 12.2.1.18.4.18**)	Not Significant (negligible) (C) Not Significant (minor) (O; CL; PC)	n/a: There is high confidence that the residual effects of the Project on groundwater quantity are not significant. No other possible sources within the LSA or RSA contribute to cumulative effects through interactions to groundwater quantity therefore cumulative effects are not expected.

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Groundwater Quality (Section 5.3.6)					
Changes in groundwater quality after mitigation that can reasonably be ascribed to the Project and not a result of natural groundwater quality variations.	All	O; CL; PC	Naturally drain and route seepage from mine sources to the TSF by gravity or collection systems. Segregate and submerge PAG/ML tailings and waste rock in TSF. Implement rapid assisted filling of pit lake in closure to minimize exposure of PAG walls and protect pit lake quality. Treat process plant and LGO stockpile drainage prior to discharge to TSF. Adhere to the following EMP: • Mine Waste Management Plan (MWMP) (**Section 12.2.1.18.4.17**)	Not Significant (minor)	n/a: No cumulative effects are expected on groundwater quality, since no other possible sources within the LSA or RSA contribute to cumulative effects to groundwater quality
Wetlands (Section 5.3.7)					
Loss of wetland functions	All	C; O; CL; PC	Avoid, minimize impacts, and compensate effects on wetlands. Adhere to the following EMP: • Mine Waste Management Plan Wetlands Management Plan (WMP) (**Section 12.2.1.18.4.3**)	Not Significant (moderate) (C; O; CL) Not Significant (minor) (PC)	Not Significant (minor)
Fish (Section 5.3.8)					
Loss of fish on the mine site	Mine site	C; O; CL; PC	Create, enhance and rehabilitate fish habitat, as described in the Fisheries Mitigation and Offsetting Plan (FMOP). Where instream construction is required, isolate work areas and salvage fish prior to starting work. Conduct instream construction during the Reduced Risk Timing Window for rainbow trout (15 July to 15 April of the following year) to	Not Significant (minor)	n/a

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			avoid interruptions to spawning migrations and egg mortalities. Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**)		
Disruption of salmonid homing to Davidson (Rainbow Trout & Kokanee)	Mine site	O; CL	Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**)	Not Significant (moderate)	
Mercury mobilization in Lake 01682LNRS	Mine site	C; O; CL; PC	Divert Lake 01682LNRS and Reach 12 of Davidson Creek into Lake 01538UEUT of the Creek 705 Watershed to ensure downstream connectivity for these water bodies. Implement seepage management system including seepage collection ponds, seepage collection trenches, and an ECD to minimize seepage releases. Implement sediment and erosion control plans and no surface water discharge during operations and closure phases. Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**)	Not Significant (minor)	
Changes in water temperature in Davidson Creek (Rainbow Trout & Kokanee)	Freshwater Supply System	C; O; CL; PC	Implement erosion and sediment control measures. Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**)	Not Significant (minor)	
Reduction in littoral fish habitat of Tatelkuz lake	Freshwater Supply System	C; O; CL	Install screens as required by DFO (1995, 2013) for intake pipes. Adherence to the following EMP:	Not Significant (negligible)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			• Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**)		
Fish Habitat (Section 5.3.9)					
Loss of fish habitat under the mine site	Mine Site	C; O; CL; PC	Cluster mine site components to reduce footprint and minimize the number of watersheds affected. Where no mitigation possible, implement the FMOP through construction of replacement habitat in Davidson Creek and other watersheds. Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**)	Not Significant (minor)	n/a
Change in fish habitat quality and availability in Davidson Creek as a result of changes in flows	Mine Site	C; O; CL; PC	Divert Lake 01682LNRS and Reach 12 of Davidson Creek into Lake 01538UEUT of the Creek 705 Watershed to ensure downstream connectivity for these water bodies. Offsetting plan, construction of replacement habitat in Davidson Creek and other watersheds in the region Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**)	Not Significant (moderate)	
Change in fish habitat quality and availability in Creek 661 downstream of Creek 505659 as a result of changes in flows	Mine Site	C; O; CL; PC	No surface discharge during operations and closure. Implement seepage management system Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**)	Not Significant (moderate)	
Change in fish habitat quality and availability in Creek 661 upstream of				Not Significant (moderate) (C; O; CL)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Creek 505659 as a result of changes in flows				Not Significant (negligible) (PC)	
Change in fish habitat quality and availability in Creek 505659 as a result of changes in flows				Not Significant (minor)	
Change in fish habitat quality and availability in Creek 705 as a result of changes in flows	Mine Site	C; O; CL; PC	Install intake pipes located at depth in Tatelkuz Lake to control temperatures in Davidson Creek Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**)	Not Significant (moderate)	
Mercury mobilization in Lake 01682LNRS	Mine Site	C; O; CL; PC	Install intake pipes located at depth in Tatelkuz Lake to control temperatures in Davidson Creek Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**)	Not Significant (minor)	
Change in fish habitat quality and availability in lower Chedakuz Creek as a result of changes in flows	Freshwater Supply System	C; O; CL	Minimize disturbance during construction and control sediment and erosion. Install screens on intake pipelines. Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**) • Mine Water Management Plan (MWAMP)	Not Significant (moderate)	
Changes in water temperature in Davidson Creek	Freshwater Supply System	C; O; CL; PC	Minimize disturbance during construction and control sediment and erosion Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**) • Mine Water Management Plan (MWAMP)	Not Significant (minor)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Reduction in littoral fish habitat of Tatelkuz Lake	Freshwater Supply System	O; CL	Adhere to the following EMP: • Aquatic Resources Management Plan (ARMP) (**Section 12.2.1.18.4.2**) • Mine Water Management Plan (MWAMP)	Not Significant (negligible)	
Terrestrial					
Physiography and Topography (Section 5.4.2)					
Alteration of Landscape from Baseline Condition	All	C; O; CL; PC	A clearly defined, compact Project footprint minimizes the overall impact on terrain and landscape features. Maintain exposed slopes to prevent accelerated erosion of soils and surficial materials until permanent vegetation is established. Adhere to the following EMP: • Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4.1**) • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Reclamation and Closure Plan (RCP) (**Section 2.6**)	Not Significant (moderate)	Not Significant (minor)
Terrain Stability and Accelerated Erosion	All	C; O; CL; PC		Not Significant (negligible)	
Surficial Geology and Soil Cover (Section 5.4.3)					
Removal and Relocation of Overburden Material	All	C; O; CL	Minimize disturbance to surficial deposits by minimizing the aerial extent of the Project footprint, utilizing areas of disturbance, and incorporating Project design features. Collect and store surface materials in ways that will maximize their effectiveness for use during reclamation as a growth medium to the extent feasible. Adhere to the following EMP:	Not Significant (negligible)	n/a: Residual effects are considered to be Not Significant (Negligible) and are not carried forward into the CEA.
Soil Disturbance	All	C; O		Not Significant (negligible)	
Soil Redistribution	All	CL		Not Significant (negligible)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			• Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4.1**) • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Reclamation and Closure Plan (RCP) (**Section 2.6**)		
Soil Quality (Section 5.4.4)					
Changes in the chemical or physical composition of the soil may affect vegetation Quality of reclamation material	All	C; O; CL; PC	Minimize disturbance to surficial deposits by minimizing the aerial extent of the Project footprint, utilizing areas of disturbance, and incorporating Project design features. Collect and store surface materials in ways that will maximize their effectiveness for use during reclamation as a growth medium to the extent feasible. Adhere to the following EMP: • Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4.1**) • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Reclamation and Closure Plan (RCP) (**Section 2.6**) • Emergency and Spill Preparedness and Response Plan (ESPRP) (**Section 12.2.1.18.4.13**)	Not Significant (negligible)	n/a: Residual effects for the Soil Quality VC are considered to be Not Significant (negligible) and are not carried forward into the CEA.
Alteration and Loss of Soil due to Terrain Stability and Accelerated Erosion	All	C; O; CL; PC		Not Significant (negligible)	
Soil Contamination due to Dust Deposition	All	C; O; CL		Not Significant (negligible)	
Chemical and Physical Alteration due to Soil Disturbance	All	C; O		Not Significant (negligible)	
Physical Alteration due to Soil Redistribution	All	CL		Not Significant (negligible)	
Ecosystem Composition (Section 5.4.5)					
Ecosystem loss effects on: Ecosystem distribution; Riparian ecosystems; Old	All	PC	Minimize the mine footprint, the clearing of linear ROWs and access and areas of disturbance outside or adjacent to areas targeted for clearing	Not Significant (moderate)	Not Significant (moderate)

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
growth forest; and Traditional use plant habitat			Collect and store surface materials in ways that will maximize their effectiveness for use during reclamation as a growth medium to the extent feasible. Adhere to the following EMP: • Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4.1**) • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Reclamation and Closure Plan (RCP) (**Section 2.6**) • Invasive Species Management Plan (ISMP) (**Section 12.2.1.18.4.5**)		
Nitrogen deposition effects on: Ecosystem distribution; Riparian ecosystems; and Traditional use plant habitat	All	PC	Adhere to the following EMP: • Air Quality and Emissions Management Plan (AQEMP) (**Section 12.2.1.18.4.9**)	Not Significant (minor)	
Spread of invasive plants effects on: Ecosystem distribution; Riparian ecosystems; and Traditional use plant habitat	All	PC	Adhere to the following EMP: • Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4.1**) • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Reclamation and Closure Plan (RCP) (**Section 2.6**) • Invasive Species Management Plan (ISMP) (**Section 12.2.1.18.4.5**)	Not Significant (minor)	
Plant Species and Ecosystems at Risk (Section 5.4.6)					
Ecosystem Loss on Plant Species and Ecosystems at Risk VC	All	PC	Reclaim whitebark pine loss due to clearing during construction and operations. Adhere to the following EMP:	Not Significant (moderate)	Not Significant (moderate)

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			• Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4.1**) • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Reclamation and Closure Plan (RCP) (**Section 2.6**) • Invasive Species Management Plan (ISMP) (**Section 12.2.1.18.4.5**)		
Nitrogen Deposition on Whitebark Pine	All	PC	Adhere to the following EMP: • Air Quality and Emissions Management Plan (AQEMP) • Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4**)	Not Significant (minor)	
Whitebark Pine Regeneration on Whitebark Pine	All	PC	Reclaim the whitebark pine trees lost, as well as measures aimed at maintaining the existing population of Clark's nutcracker including supplemental feeding after mine operations and during reclamation until trees mature and produce sufficient seeds to the extent feasible.	Not Significant (moderate)	
Amphibians (Section 5.4.7)					
Unavoidable loss of wetland and forest breeding, living and hibernation habitat	All	C; O	Avoid large scale clearing of old-growth forest to the extent feasible and implement wetland compensation measures. Adhere to the following EMP: • Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4.1**) • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Reclamation and Closure Plan (RCP) (**Section 2.6**)	Not Significant (negligible)	n/a: A Cumulative Effects Assessment (CEA) for the Amphibian VC is not necessary because the Project is expected to have a Not Significant (negligible) residual effect of habitat loss and alteration, mortality risk, and amphibian movement.

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			• Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)		
Direct mortality from collisions	All	C; O; CL, PC	Implement adaptive management for possible road crossings, pre-construction surveys and salvage during breeding season. Adhere to the following EMP: • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (negligible)	
Unavoidable indirect mortality of amphibians	All	C; O; CL; PC	Manage attractants Adhere to the following EMP: • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (negligible)	
Water Birds (Section 5.4.8)					
Unavoidable loss of habitat	All	C; O; CL, PC	Avoid wetlands and waterbodies to extent feasible. Adhere to the following EMP: • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**) • Conceptual Wetlands Compensation Plan (**Appendix 5.3.7A**)	Not Significant (minor)	Not Significant (minor)
Potential for increased mortality caused by vehicle and aircraft collisions, and increased hunter access.	All	C; O; CL, PC	Enforce speed limits Adhere to the following EMP: • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (negligible)	n/a
Potential for increased mortality caused by increased predator access	All	C; O; CL, PC	Manage chemicals such as road salt to reduce leaching into waterbodies. Adhere to the following EMP:	Not Significant (negligible)	n/a

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
related to alternate prey increases near roads.			• Emergency and Spill Preparedness and Response Plan (ESPRP) (**Section 12.2.1.18.4.13**) • Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4.1**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)		
Forest and Grassland Birds (Section 5.4.9)					
Unavoidable loss of habitat Forest and Grassland Birds (not including Clark's Nutcracker)	All	C; O; CL, PC	Progressive reclamation with appropriate species, maintain forest function and vegetation cover. Replanting of whitebark pine during operations, closure and post closure. Potential for supplemental feeding and augmentation if needed, radio-tagging and monitoring use and movement of nutcrackers. Adhere to the following EMP: • Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4.1**) • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Reclamation and Closure Plan (RCP) (**Section 2.6**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (minor)	Not Significant (minor)
Unavoidable loss of habitat for Clark's Nutcracker	All	C; O; CL, PC		Not Significant (moderate)	Not Significant (moderate)
Moose (Section 5.4.10)					
Unavoidable loss or degradation of habitat	All	C; O; CL; PC	Avoid large scale clearing of old-growth forest and implement wetland compensation measures. Implement adaptive measures to respond to presence of moose in proximity to the mine or	Not Significant (negligible)	n/a

Residual Effects	Project Activity or Physical Works/Project Component[2]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			access issues along transmission ROW or fresh water pipeline ROW. Adhere to the following EMP: • Sediment and Erosion Control Plan (SECP) (**Section 12.2.1.18.4.1**) • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Reclamation and Closure Plan (RCP) (**Section 2.6**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)		
Unavoidable direct mortality of moose	All	C; O; CL; PC	Manage chemical hazards and attractants and their use on roadways and around the mine site. Restrict access to only individuals working directly for the Proponent; gate access points and close mine roads when no longer required after mine reclamation Implement no hunting and no firearm policy Adhere to the following EMP: • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**) • Reclamation and Closure Plan (RCP) (**Section 2.6**) • Country Food Monitoring Plan (CFMP) (**Appendix 9.2.2B**)	Not Significant (minor)	Not Significant (minor)
Unavoidable displacement from habitats near mine site, access road or airstrip	All	C; O; CL	Minimize Project footprint. Adhere to the following EMP:	Not Significant (minor)	Not Significant (minor)

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			• Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)		
Unavoidable indirect mortality of moose Change in predator-prey dynamics	All	C; O; CL; PC	Adhere to the following EMP: • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (minor)	Not Significant (minor)
Caribou (Section 5.4.11)					
Unavoidable loss of lichen habitat during the life of the Project	All	C; O; CL; PC	Implement progressive reclamation with appropriate species to accelerate reclamation of preferred caribou habitat through silviculture methods. Avoid large scale clearing of old-growth forest and lichen rich stands to extent feasible. Implement adaptive measures to respond to presence of caribou in proximity to the mine. Adhere to the following EMP: • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**) • Reclamation and Closure Plan (RCP) (**Section 2.6**)	Not Significant (moderate)	Not Significant (moderate)
Direct mortality from collisions or poaching	All	C; O; CL	Restrict access to only individuals working directly for the Proponent; gate access points and close mine roads when no longer required after mine reclamation Implement no hunting policy Adhere to the following EMP: • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (negligible)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Unavoidable indirect mortality of caribou due to increases in prey density or wolves	All	C; O; CL	• Commitment to work with other resource users, government and First Nations on metapopulation studies and mitigation • Adhere to the following EMP: • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (minor)	
Grizzly Bear (Section 5.4.12)					
Unavoidable loss of habitat	All	C; O; CL	Avoid large scale clearing of old-growth forest to the extent feasible. Primary areas of concern are mature and old-growth forests in the mine site and the transmission line. Avoid clearing and development in berry and Kokanee areas to the extent feasible. Adhere to the following EMP: • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (minor)	Not Significant (minor)
Unavoidable mortality of grizzly bears	All	C; O; CL	Restrict access to only individuals working directly for the Proponent; gate access points and close mine roads when no longer required after mine reclamation Implement no hunting policy Adhere to the following EMP: • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (minor)	Not Significant (minor) (Contribution to Cumulative Environmental Effects) Significant (Current/Future Cumulative Environmental Effect(s) with the Project)
Furbearers (Section 5.4.13)					
Unavoidable loss of habitat (except beaver)	All	C; O; CL; PC	Avoid large scale clearing of old-growth forest to the extent feasible. Primary areas of concern	Not Significant (minor)	Not Significant (minor)

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			are mature and old-growth forests in the mine site and the transmission line. Adhere to the following EMP: • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4)** • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)		
Unavoidable loss of habitat for beaver	All	C; O; CL; PC	Avoid large scale clearing of old-growth forest to the extent feasible Primary areas of concern are mature and old-growth forests in the mine site and the transmission line. Avoid clearing and development of berry and kokanee areas. Adhere to the following EMP: • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (negligible)	n/a
Unavoidable direct mortality of beaver	All	C; O; CL; PC	Restrict access to only individuals working directly for the Proponent; gate access points and close mine roads when no longer required after mine reclamation Implement no hunting policy Adhere to the following EMP: • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (minor)	Not Significant (minor)
Unavoidable indirect mortality of beaver	All	C; O; CL; PC	Manage attractants during construction, operation, and decommissioning and closure. Adhere to the following EMP:	Not Significant (negligible)	n/a

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			• Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Reclamation and Closure Plan (RCP) (**Section 2.6**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**) • Emergency and Spill Preparedness and Response Plan (ESPRP) (**Section 12.2.1.18.4.13**)		
Bats (Section 5.4.14)					
Unavoidable loss of habitat	All	C; O; CL	Provide bat roost and maternal boxes in suitable habitat near clearings. Adhere to the following EMP: • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (negligible)	n/a: With the implementation of the proposed mitigation measures, the residual effects of the Project are predicted to be Not Significant (negligible), therefore no cumulative effects are expected.
Unavoidable mortality	All	C; O; CL	Adhere to the following EMP: • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (negligible)	
Invertebrates (Section 5.4.15)					
Unavoidable loss of habitat	All	C; O; CL; PC	Avoid black spruce bogs and wetlands, or maintain hydrologic functions to the extent feasible. Adhere to the following EMP: • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (minor)	Not Significant (minor)

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Mortality Risk: Unavoidable mortalities	All	C; O; CL	Avoid black spruce bogs and wetlands, or maintain hydrologic functions to the extent feasible. Adhere to the following EMP: • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (negligible)	
Invertebrate Health: Unavoidable mortalities	All	C; O; CL	Adhere to the following EMP: • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Water Quality and Liquid Discharges Management Plan (WQLDMP) (**Section 12.2.1.18.4.10**)	Not Significant (negligible)	
Economic					
Provincial economy (**Section 6.2.2**)	All	CL	Negative effects of mine closure on economic activity, employment, and government revenue are unavoidable. Mitigating these effects occurs at a regional level, and not at a provincial level.	Not Significant (negligible)	n/a: The only adverse effect (closure) is negligible, and thus, is not carried forward into the CEA.
Regional and local employment and businesses (**Section 6.2.3**)	All	CL	The overall net effects of Project construction and operations on regional and local employment and businesses are positive and do not require mitigation. While mitigation is not required, there are opportunities for enhancement of local and regional benefits through increasing the percentage of direct employment and procurement of Project goods and services acquired from regional suppliers.	Not Significant (minor)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Regional and local government finance (**Section 6.2.4**)	All	CL	Overall net effects of Project construction and operations on local and regional government revenues are neutral and positive and do not require mitigation. Negative effects on regional and local government revenues that would result from mine closure are unavoidable and cannot be mitigated.	Not Significant (negligible)	
Social					
Demographics (Section 7.2.2)					
No appreciable population effect on the communities of the SERSA is expected	All	C	Establish a construction camp. Establish an airstrip to transport construction workers from outside the SERSA Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (negligible)	n/a: The Project effects on population are driven by Project employment demands. During construction and closure, the adverse residual effects on demographics are expected to be negligible and are not carried forward into the CEA.
In-migration of workers and their dependants would create minor changes in the SERSA population	All	O	Develop and hire the majority of the operations workforce from within the SERSA to the extent feasible. Establish an operations camp to accommodate workers Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (minor)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Out-migration of operation workers could create minor changes in the SERSA population	All	CL	Hire the majority of the CL workforce from within the SERSA. Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (negligible)	
Regional and Community Infrastructure (Section 7.2.3)					
No appreciable increase in housing demand is expected	All	C	Establish a construction camp. Establish an airstrip to transport construction workers from outside the SERSA Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (negligible)	n/a
Increase in housing demands that are within the current SERSA capacity and approved expansion plans	All	O	Develop and hire the majority of the operations workforce from within the SERSA. Establish an operations camp to accommodate workers Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (minor)	
Decrease in housing demands due to potential out-migration of workers	All	CL	Work with the SERSA communities to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine	Not Significant (negligible)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)		
No appreciable increase in demand for utilities is expected	All	C	Establish a construction camp to accommodate workers to offset Project's demands for utility services Establish an to transport construction workers from outside the SERSA Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (negligible)	
Increase in demands for utility services that are within the current SERSA capacity and approved expansion plans	All	O	Hire the majority of the operations workforce from within the SERSA to the extent feasible Provide incentives and inducements for workers who are interested in moving in permanently to the LSA Adhere to the following EMP: • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**) • Industrial and Domestic Waste Management Plan (**Section 12.2.1.18.4.11**)	Not Significant (minor)	
Out-migration of workers could reduce demands for utilities	All	CL	No mitigation required	Not Significant (negligible)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
No appreciable increase in demand for recreation and leisure services is expected	All	C	Establish a construction camp to accommodate workers to offset Project's demands for recreation and leisure services Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (negligible)	
Increase in demands for recreational facilities that are within the current SERSA capacity and approved expansion plans	All	O	Hire the majority of the operations workforce from within the SERSA to the extent feasible Establish an operations camp with indoor and outdoor recreation facilities to offset Project's demands for recreation and leisure services Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (minor)	
Out-migration of workers could reduce demands for recreational and leisure services	All	CL	Work with local service providers to incorporate potential decline in population in planning during closure Work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (negligible)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Risk of motor vehicle accidents and road wear within normal range for Hwy 16 and FSRs	All	C	Bus construction workers from Vanderhoof and establish an airstrip to reduce traffic volume Upgrade a bridge and small section of Kluskus FSR Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (minor)	
Risk of motor vehicle accidents and road wear within normal range for Hwy 16 and FSRs	All	O	Bus operations workers between Vanderhoof and mine to reduce traffic volume Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (minor)	
With sharp decline in workforce and truck traffic, no noticeable effect on motor vehicle safety and road wear	All	CL	Provide busing for closure workers between Vanderhoof and mine to reduce traffic volume Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (negligible)	
Regional and Local Services (Section 7.2.4)					
No appreciable increase pressures for education services is expected	All	C	Establish a construction camp to limit in-migration and any related demands for school services. Adhere to the following EMP:	Not Significant (negligible)	n/a

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			• Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)		
Out-migration of workers could slightly reduce demands for education services	All	CL	Work with local service providers to incorporate decline in population in planning during closure. Work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine. Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (negligible)	
Increase in demands for health services that are within the current SERSA capacity	All	C	Establish a construction camp and worker rotation policies to offset Project's demands for health services. Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (negligible)	
Increase in demands for health services that are within the current SERSA capacity	All	O	Establish an operations camp to offset Project's demands for health services.	Not Significant (minor)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Out-migration of workers could reduce demands for health services	All	CL	Work with local service providers to incorporate decline in population in planning during mine closure. Work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine.	Not Significant (minor)	
Increase in demands for protective services	All	C	Work closely with Northern Health, local fire departments, RCMP, and BC Ambulance to ensure that the appropriate information on the changes in area transportation volumes, mine operations, and the change to the local population are considered. Provide full firefighting equipment and trained personnel to meet all onsite fire and rescue needs. Provide at the mine site trained mine rescue personnel and mine rescue equipment as well as onsite security.	Not Significant (negligible)	
Traffic volume, mine operations, and in-migration create demand for regional services	All	O	Hire the majority of the operations workforce from within the SERSA to the extent feasible.	Not Significant (minor)	
Decline in traffic volume and closure of mine operations, and out-migration of population decrease demand for regional services	All	CL	Work with local service providers to incorporate decline in population in planning during mine closure. Work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine.	Not Significant (minor)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
No appreciable increase in demand for social services is expected	All	C	Establish a construction camp to offset Project's demands for social services. Implement a no alcohol or drugs onsite policy. Establish a respectful workplace, no harassment, safety and security, multi-cultural workforce considerations, and Aboriginal awareness training.	Not Significant (negligible)	
Increase in demands for social services that are within the current SERSA capacity	All	O	Hire the majority of the operations workforce from within the SERSA to the extent feasible. Establish an operations camp to offset Project's demands for social services	Not Significant (minor)	
Out-migration of workers could reduce demands for social services	All	CL	Work with local service providers to incorporate decline in population in planning during mine closure. Work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine.	Not Significant (minor)	
Family and Community Well-Being (Section 7.2.5)					
Reduction of employment income and potential increase of economic hardship	All	CL	Work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine; and Work with local education providers to facilitate access to training programs and skills upgrading	Not Significant (minor)	n/a: The lack of specific data on economic hardship, crime and family relationships effects from potentially overlapping projects, and the inability to predict future baseline conditions, means it is impractical to conduct a separate cumulative effects assessment for these
No substantial increase in disruptive or illegal activities is expected since no appreciable migration is	All	C	Offer counselling services as well as cultural awareness training and harassment-free workplace to employees; and	Not Significant (negligible)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
anticipated during construction			Work with local agencies to assist in monitoring community well-being and to take corrective actions where appropriate.		indicators. The key to determining whether there are cumulative effects, and if so, how to manage those, will be addressed through ongoing cooperation and consultation amongst the stakeholders.
Reduction of community well-being if in-migrant families engaged in socially disruptive activities or families spend their additional income in disruptive or illegal activities	All	O	Offer counselling services as well as cultural awareness training and harassment-free workplace to employees; and Work with local agencies to assist in monitoring community well-being and to take corrective actions where appropriate.	Not Significant (minor)	
Potential deterioration of family relationships	All	C	Offer counselling services as well as cultural awareness training and harassment-free workplace to its employees; and Work with local agencies to assist in monitoring community well-being and to take corrective actions where appropriate.	Not Significant (minor)	
Potential deterioration of family relationships	All	O	Deposit workers' salaries in their bank accounts and provide access to money management training; Offer reasonably short shift rotations to minimize separation from family (14 days on/14 days off and 4 days on/3 days off) and allow flexibility to accommodate hard to fill positions; Ensure phone and Internet services are available to enable employees to communicate with their families	Not Significant (minor)	
Non-Traditional Land and Resource Use (Section 7.2.6)					
Recreation/Tourism Use; Hunting, Trapping, and Guide Outfitting	Mine site study area	C, O, CL	Ongoing communication with trappers, guide outfitters, farmers, ranchers, livestock and	Not Significant (minor)	Not Significant (minor) (Recreation/Tourism Use)

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Mining Exploration and Mineral Tenures; Forestry and Timber Resource Use			stakeholders to resolve issues when required and/or if applicable. Inform water-based recreational stakeholders about construction activities in advance i.e., Northwest Brigade Paddling Club, nearby lodges, the local offices of BC FLNRO. Adhere to the following EMP: • Transportation and Access Management Plan (TAMP) (**Section 12.2.1.18.4.14)** • Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (**Section 12.2.1.18.4.4**) • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (minor)	Not Significant (minor) (Mining Exploration and Mineral Tenures) Not Significant (minor) (Forest and Timber Resource Use) Not Significant (minor) (Hunting, Trapping, and Guide Outfitting) Not Significant (negligible) (Agriculture and Grazing) Not Significant (minor) (Land Ownership (Private Lands)) Not Significant (minor) (Transportation and Access)
Recreation/Tourism Use; Agriculture and Grazing	Mine site access road	C, O, CL		Not Significant (minor)	
Forestry and Timber Resource Use				Not Significant (minor)	
Hunting, Trapping, and Guide Outfitting				Not Significant (minor)	
Recreational and Commercial Use of Waterways	Mine site access road	C, CL		Not Significant (minor)	
Recreation/Tourism Use; Agriculture and Grazing	Airstrip	C, O, CL		Not Significant (minor)	
Mining Exploration and Mineral Tenures; Forestry and Timber Resource Use				Not Significant (minor)	
Hunting, Trapping, and Guide Outfitting				Not Significant (minor)	
Recreation/Tourism Use; Agriculture and Grazing	Water Supply	C, O, CL		Not Significant (minor)	
Mining Exploration and Mineral Tenures; Forestry and Timber Resource Use				Not Significant (minor)	
Hunting, Trapping, and Guide Outfitting;				Not Significant (minor)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Recreational and Commercial Use of Waterways					
Recreation/Tourism Use; Hunting, Trapping, and Guide Outfitting; Agriculture and Grazing	Transmission Line	C, O, CL		Not Significant (minor)	
Mining Exploration and Mineral Tenures; Forestry and Timber Resource Use; Land Ownership				Not Significant (minor)	
Land Ownership (Private Lands)				Not Significant (minor)	
Surface Water and Groundwater Resource Use				Not Significant (minor)	
Recreational and Commercial Use of Waterways				Not Significant (minor)	
Transportation and Access				Not Significant (minor)	
Land Ownership (Private Lands)	FSR	C, O, CL		Not Significant (minor)	
Recreation/Tourism Use; Forestry and Timber Resource Use; Agriculture and Grazing; Transportation and Access				Not Significant (minor)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Current Land and Resource Use for Traditional Purposes (Section 7.2.7)					
LDN - Hunting	All	C; O; CL; PC	Establish a group including potentially affected Stakeholders and Aboriginal group representatives to discuss access management for the transmission line corridor. Adhere to the following EMP: • Wildlife Management Plan (WLMP) (**Section 12.2.1.18.4.6**)	Not Significant (moderate)	Not Significant (moderate)
LDN - Trapping	All	C; O; CL; PC		Not Significant (minor)	Significant
LDN - Fishing	All	C; O; CL; PC		Not Significant (minor)	n/a
LDN - Plant Gathering	All	C; O; CL; PC		Not Significant (minor)	Not Significant (moderate)
LDN - Other Cultural and Traditional Uses of the Land (trails)	All	C		Not Significant (negligible)	n/a
UFN - Hunting	All	C; O; CL; PC		Not Significant (moderate)	Not Significant (moderate)
UFN - Trapping	All	C; O; CL; PC		Not Significant (minor)	Not Significant (moderate)
UFN - Fishing	All	C; O; CL; PC		Not Significant (minor)	n/a
UFN – Plant Gathering	All	C; O; CL; PC		Not Significant (minor)	Not Significant (moderate)
UFN - Other Cultural and Traditional Uses of the Land (trail at mine site and CMTs)	All	C; O; CL; PC		Not Significant (minor)	n/a
UFN - Other Cultural and Traditional Uses of the Land (Messue Wagon Trail)	All	C		Not Significant (negligible)	n/a

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Visual Resources (Section 7.2.8)					
Stellako River Crossing Point	Transmission Line	C; O; CL; PC	Adhere to the following EMP: • Visual Resources and Aesthetics Management Plan (VRAMP) (**Section 12.2.1.18.4.8**)	Not Significant (moderate)	Not Significant (minor)
Cheslatta Trail Crossing Point	Transmission Line	C; O; CL; PC		Not Significant (minor)	Not Significant (minor)
Nechako River Crossing Point	Transmission Line	C; O; CL; PC		Not Significant (moderate)	Not Significant (minor)
Brewster Lake Recreation Site	Transmission Line	C; O; CL; PC		Not Significant (minor)	Not Significant (minor)
Tatelkus Lake Southeast Recreation Reserve	All	C; O; CL; PC		Not Significant (moderate)	Not Significant (moderate)
Dykam Ranch	All	C; O; CL; PC		Not Significant (moderate)	Not Significant (moderate)
Tatelkus Lake Reserve IR 28	All	C; O; CL; PC		Not Significant (moderate)	Not Significant (moderate)
Heritage					
Land-altering activities impact archaeological sites (**Section 8.2.2**)	All	C; O	Implement archaeological site protection as required. Conduct systematic data recovery. Implement a Chance Find procedure Adhere to the following EMP: • Archaeology and Heritage Resources Management Plan (AHRMP) (**Section 12.2.1.18.4.7**)	Not Significant (negligible)	n/a: The archaeological assessment identified no Project effects on archaeological sites, heritage sites or paleontological sites. Therefore, the residual effects of the Project on archaeological, heritage and paleontological resources are Not
Land-altering activities impact historic heritage sites (**Section 8.2.3**)	All	C; O	Implement historic heritage site protection as required. Conduct systematic data recovery. Implement a Chance Find procedure. Adhere to the following EMP:	Not Significant (negligible)	

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
			• Archaeology and Heritage Resources Management Plan (AHRMP) (**Section 12.2.1.18.4.7**)		Significant (negligible), and an assessment of cumulative effects for the Project is not warranted.
Land-altering activities impact paleontological sites (**Section 8.2.4**)	All	C; O	As there are no known potential project effects on palaeontological sites, no mitigation measures are required for this VC. Implement a Chance Find procedure. Adhere to the following EMP: • Archaeology and Heritage Resources Management Plan (AHRMP) (**Section 12.2.1.18.4.7**)	Not Significant (negligible)	
Health Pillar					
Environmental Exposures (Section 9.2.2)					
Project-related noise	All	C, O, CL	Meet air and water standards. No surface water discharge during operations and closure. Adhere to the following EMP: • Air Quality and Emissions Management Plan (AQEMP) (**Section 12.2.1.18.4.9**) • Country Food Monitoring Plan (**Appendix 9.2.2B**) • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (negligible)	n/a: Residual effects of the Project related to environmental exposures are predicted to be Not Significant (negligible); therefore, a CEA is not required.
Project-related environmental contaminants	All	C, O, CL		Not Significant (negligible)	
Worker Safety and Health (Section 9.2.3)					
Potential hazards in the construction industry including exposure to welding fumes, dusts, and vapours noise, heat and cold, radiation, and vibration.	All	C, CL	Adhere to the following EMP: • Occupational Health and Safety Management Plan (OHSMP) (**Section 12.2.1.18.4.15**)	Not Significant (negligible)	n/a: Residual effects for worker health and safety concerns are predicted to be Not Significant (negligible); therefore, a CEA is not required.

Residual Effects	Project Activity or Physical Works/Project Component[(2)]	Project Phase(s)	Mitigation Measures	Significance of Residual Effects	Significance of Cumulative Effects
Potential hazards during mine operations including exposure to dust, cyanide and safety conditions.	All	O		Not Significant (negligible)	

21.5 Summary of Mitigation Measures and Commitments

The environmental assessment process identified several VCs with effects assessed to be at least moderate, a low level of certainty associated with the significance determination or mitigation measures require monitoring to confirm the effectiveness of the performance. The effectiveness of the mitigation measures and determination of significance will be confirmed through the implementation of follow-up programs. In addition, several permits are expected to require monitoring of compliance of permit conditions. With respect to Aboriginal rights and interests, the Proponent is committed to seek and integrate TK when it is available to inform the design and management of the Project.

Table 21.5-1 presents the key mitigation commitments made by the Proponent to avoid, reduce, or offset adverse effects of the Project. More details are provided in **Section 20** Summary of Mitigation Measures of the Application for an Environmental Assessment Certificate/ Environmental Impact Statement (Application) which summarizes the key mitigation measures considered in the environmental effects assessment as listed in **Section 5.5**, **Section 6.3**, **Section 7.3**, **Section 8.3**, **Section 9.3** and additional commitments from **Sections 10**, **12** and **13** (**Table 21.5-1**).

Table 21.5-1: Proponent's Table of Proposed Mitigation Measures

Key Mitigation Measures/Commitments
Project Description
Cluster mine site components to minimize the project mine site footprint to about 4,400 ha.
Site mine facilities to avoid the Blackwater River drainage to the south, Kokanee habitat to the north and the UWR to the west.
Adhere to the International Cyanide Management Code, and follow Environment Canada's Environmental Code of Practice for Metal Mines.
Prevent surface water discharge from the mine site during operations and closure (about 18 years until pit lake full) by recycling tailings supernatant water and directing contact water to the TSF.
Minimize seepage from the TSF by constructing a cut-off trench, ECD, collection ditches, and seepage pump back system. Install a hydraulic barrier to prevent seepage from TSF Site C reaching Lake 01538UEUT (Lake 15) in the adjacent Creek 705 watershed. Construct a runoff and seepage collection ditch below the East Dump and direct collected water to the TSF.
Segregate PAG/ML waste rock and submerge with tailings in the TSF. Submerge PAG1 and PAG2 waste rock within one year and NAG3 within five years. Treat acidic runoff from the LGO and temporary ore stockpiles with lime and discharge to the TSF.
Pump water from Tatelkuz Lake to a water reservoir below the ECD to meet instream flow needs in Davidson Creek. Commence flow maintenance immediately prior to the start of Project-induced flow reductions and operate through the operations and closure phases until the TSF discharges to Davidson Creek.
Treat the tailings from the mill using the SO_2/air process prior to discharge to the TSF. Place a minimum 30 cm overburden layer on top of the tailings and waste rock in the TSF during closure to isolate the supernatant from TSF porewater.
Environmental Management System
Develop a comprehensive EMS, based on prevention, mitigation, and management of impacts identified in the EA. The EMS will guide implementation of the Proponent's environmental policy throughout the life of the Project.

Atmospheric Environment
Implement a dust control plan including water haul roads when required and install dust control systems for the crusher.
Aquatic Environment
Divert Lake 16 through a newly constructed stream channel to Lake 01538UEUT (Lake 15) in the adjacent Creek 705 watershed to maintain a self-sustaining population of rainbow trout in Lake 16 (provides connectivity and access to spawning habitat required by this headwater lake population).
Implement the Fisheries Mitigation and Offsetting Plan for the replacement of loss habitat in Davidson Creek and other watersheds to meet the objectives of the *Fisheries Act*.
Construct sediment control facilities including diversion and collection ditches, sediment control ponds, and implement BMPs prior to surface disturbance. Maintain flocculent addition systems as contingency measures.
Terrestrial Environment
Strip and stockpile topsoil for later use in reclamation. Conduct progressive reclamation of the West Dump, TSF Site C and topsoil stockpiles when feasible.
Develop and implement a Whitebark Pine Management Plan in consultation with applicable regulatory authorities.
Wildlife and Wildlife Habitat
Continue to support regional management initiatives for ongoing research and monitoring of the Tweedsmuir-Entiako Northern Caribou subpopulation and their habitat use near the mine.
Economic
Enhance local and regional benefits by increasing the direct employment from the SERSA and procurement of Project goods and services acquired from regional suppliers.
Continue to support the Community Liaison Committee to identify issues and develop mitigation recommendations related to service provision, housing, and health and social services that might result in costs to local and regional government.
Social
Provide incentives and inducements to workers to move permanently to the LSA and encourage the Proponent's management team to reside in the SERSA.
Provide an airstrip on-site (during construction), to facilitate transport of workers from outside the SERSA and provide busing between Vanderhoof and the mine construction and operations camps.
Undertake upgrades to sections of the Kluskus FSR to enhance transportation safety.
Provide a self-contained camp and worker rotation policies during the construction phase in order to offset Project demands for regional services.
Implement a strict no on site alcohol and drug policy and no hunting and fishing policy while on company business.
Implement policies to promote: no workplace harassment; health, safety and security; multi-cultural workforce considerations; and Aboriginal awareness training.
Implement a training strategy that will include: • Working with training institutions such as College of New Caledonia and BC Aboriginal Mine Training Association and local education providers to provide training programs and skills upgrading • Partner with local contractors to provide the Proponent's apprenticeship programs • Sourcing and training under-represented groups Offering scholarships to encourage high school graduation
Work with local agencies to assist in monitoring community well-being and to take corrective actions where appropriate.
Work with Aboriginal groups to identify and remove barriers to employment and training.

Land Use
Communicate with trappers, guide outfitters, farmers, ranchers, livestock and stakeholders to resolve issues when required and/or if applicable. Compensate affected trapline holders in accordance with industry and provincial protocols.
Implement a Traffic Control and Management Strategy along the ROWs.
Facilitate movement of livestock and farm machinery across the ROW corridors, where applicable.
Follow all BC MFLNRO guidelines and requirements for clearing, handling, and hauling beetle-infested wood.
Establish a group including affected Aboriginal group representatives to discuss access management for the transmission line corridor.
Participate in regional wildlife and resource management initiatives (specifically for ungulates).
Provide the results of all water quality sampling to designated First Nations representatives for review.
Inform workers of sensitive cultural areas, and implementing a policy of reporting and respectful use.
Heritage
Implement a “chance find” procedure for archaeological and heritage resources.
Record, analyze, and mitigate physical remains of cultural sites, such as cabins, archaeological sites, culturally modified trees, and trails identified through heritage effects assessments.
Through bilateral discussion between the Proponent and affected First Nations, the Proponent will facilitate access to the mine site area by First Nations for cultural purposes, provided safe access can be accommodated.
Health
Maintain an excellent safety culture and operate within an occupational health and safety management system.
Implement the Country Food Monitoring Plan to Aboriginal groups and agencies.

Note: Project phase: C = construction; CL = closure; O = operations; PC = post-closure; BMP = best management practice; EA = Environmental Assessment; ECD = Environmental Control Dam; EMS = Environment Management System; FSR = Forest Service Road; ha = hectare; LGO = low-grade ore; LSA = Local Study Area; ML = Metal Leaching; NAG = non-acid generating; PAG = potentially acid generating; ROW = right-of-way; SERSA = Socioeconomic Regional Study Area; TSF = Tailings Storage Facility; UWR = Ungulate Winter Range.

21.6 Aboriginal Groups – Consultation and Mitigation

The Proponent has engaged with Aboriginal groups potentially affected by the Project since acquiring the Project in 2011. The Proponent has focused the consultation with the following Aboriginal groups:

- Lhoosk’uz Dene Nation (LDN);
- Nadleh Whut’en First Nation (NWFN);
- Saik’uz First Nation (SFN);
- Stellat’en First Nation (StFN); and
- Ulkatcho First Nation (UFN).

The Proponent has also discussed the Project and informed these Aboriginal groups:

- Nazko First Nation (NFN);
- Skin Tyee Nation (STN);
- Tsilhqot’in National Government (TNG); and

- Métis Nation of British Columbia (MNBC).

The Proponent has provided site tours, attended numerous meetings with Aboriginal leadership, held and encouraged community meetings, and participated in one-on-one meetings with key community members who are most dependent on local resources for spiritual, cultural, and basic needs (e.g., Elders and knowledge holders, and land users such as trappers and harvesters) in an effort to gather Traditional Knowledge/Traditional Land Use (TK/TLU) information.

The Project has the potential to affect current land and resource uses for traditional purposes. The assessment evaluated effects of potential restrictions on access to land and resources, changes in the amount of resources available, and sensory disturbances within the context of the Current Land and Resource Use for Traditional Purposes (CLRUTP) VC.

The assessment considered the potential effects of the Project and activities in relation to the following indicators:

- Hunting;
- Trapping;
- Fishing;
- Plant gathering; and
- Other cultural and traditional uses of the land.

Mitigation measures were developed to address the potential adverse Project effects. Effects on specific species relevant to hunting, fishing, trapping, and plant gathering are considered in studies of Wildlife, Fish and Fish Habitat, Landscape, and Soils and Vegetation. Implementation of Environmental Management Plans (EMPs) will minimize or help avoid effects throughout the life of the Project.

The Proponent will continue to discuss potential Project effects on traditional pursuits with affected Aboriginal communities throughout the life of the Project. Should additional information regarding an Aboriginal community's CLRUTP (such as TK and/or a TLU study) become available, the Proponent will review and assess any potential effects and necessary mitigation measures. Specifically, the Proponent will use these analyses to inform detailed engineering design and post-EA permitting as well as EMPs for the construction, operation and closure of the mine.

Section 18, Summary of Aboriginal Groups Information, summarizes the potential effects of the Project on asserted Aboriginal rights in the Project area, as well as specific accommodation measures including design considerations, mitigation measures, and specific commitments to address those effects.

21.7 Request for an Environmental Certificate

The Proponent makes it a priority to act as a responsible mining company, from management practices, to health and safety standards, to stewardship of the environment. The Proponent

understands that business activities have an effect on the people who work in the Proponent's operations, their environment, and on their communities. The Proponent's growth and success as a company depends on the long-term economic, social, and environmental sustainability of each of the communities in which the company works and lives.

In light of the significant benefits offered by the Project, that there are no significant adverse residual Project effects and that the Project will not contribute to incremental significant cumulative effects given that necessary mitigation measures will be implemented and subsequent permitting/authorization processes prior to proceeding with proposed Project construction operations, and closure, the Proponent respectfully requests:

- An EA Certificate for the Project; and
- A federal ministerial decision for the Project.