

## *Appendix 8-A*

### *Interaction of Project Components and Activities with Proposed Valued Components*

HARPER CREEK PROJECT

**Application for an Environmental Assessment Certificate /  
Environmental Impact Statement**



**Appendix 8-A. Interaction of Project Components and Activities with Proposed Valued Components**

Category	Project Components and Activities	Revenue and Taxes	Community Growth	Visual Quality	Traffic	Forestry	Agriculture	Commercial Interests	Recreational Land Use	Navigable Waters	Water Licences	Recreational Water Use	Private Land	Current Use of Lands and Resources for Traditional Purposes	Archaeology	Paleontology	Historical Use	Cultural heritage	Human Health	Air Quality	Drinking Water Quality	Noise and Vibration	Country Foods	Worker Safety and Health	Recreational or Aesthetic Features	Physical Activity	Healthy Living	Community Health
<b>Construction</b>																												
Concrete production	Concrete batch plant installation, operation and decommissioning																											
Dangerous goods and hazardous materials	Hazardous materials storage, transport, and off-site disposal																											
	Spills and emergency management																											
Environmental management and monitoring	Construction of fish habitat offsetting sites																											
Equipment	On-site equipment and vehicle use: heavy machinery and trucks																											
Explosives	Explosives storage and use																											
Fuel supply, storage and distribution	Fuel supply, storage and distribution																											
Open pit	Open pit development - drilling, blasting, hauling and dumping																											
Potable water supply	Process and potable water supply, distribution and storage																											
Power supply	Auxiliary electricity - diesel generators																											
	Power line and site distribution line construction: vegetation clearing, access, poles, conductors, tie-in																											
Processing	Plant construction: mill building, mill feed conveyor, truck shop, warehouse, substation, and pipelines																											
	Primary crusher and overland feed conveyor installation																											
Procurement and labour	Employment and labour																											
	Procurement of goods and services																											
Project Site development	Aggregate sources/ borrow sites: drilling, blasting, extraction, hauling, crushing																											
	Clearing vegetation, stripping and stockpiling topsoil and overburden, soil salvage handling and storage																											
	Earth moving: excavation, drilling, grading, trenching, backfilling																											
Rail load-out facility	Rail load-out facility upgrade and site preparation																											
Roads	New TMF access road construction: widening, clearing, earth moving, culvert installation using non-PAG material																											
	Road upgrades, maintenance and use: haul and access roads																											
Stockpiles	Coarse ore stockpile construction																											
	Non-PAG Waste Rock Stockpile construction																											
	PAG and Non-PAG Low-grade ore stockpiles foundation construction																											
	PAG Waste Rock stockpiles foundation construction																											
Tailings management	Coffer dam and South TMF embankment construction																											
	Tailings distribution system construction																											
Temporary construction camp	Construction camp construction, operation, and decommissioning																											
Traffic	Traffic delivering equipment, materials and personnel to site																											
Waste disposal	Waste management: garbage, incinerator and sewage waste facilities																											
Water management	Ditches, sumps, pipelines, pump systems, reclaim system and snow clearing/stockpiling																											
	Water management pond, sediment pond, diversion channels and collection channels construction																											
<b>Operations 1</b>																												
Concentrate transport	Concentrate transport by road from mine to rail loadout																											
Dangerous goods and hazardous materials	Explosives storage and use																											
	Hazardous materials storage, transport, and off-site disposal																											
	Spills and emergency management																											

Note: a column is marked with an X when it has been determined that the Project component or activity could potentially interact with the VC.



**Appendix 8-A. Interaction of Project Components and Activities with Proposed Valued Components**

Category	Project Components and Activities	Revenue and Taxes	Community Growth	Visual Quality	Traffic	Forestry	Agriculture	Commercial Interests	Recreational Land Use	Navigable Waters	Water Licences	Recreational Water Use	Private Land	Current Use of Lands and Resources for Traditional Purposes	Archaeology	Paleontology	Historical Use	Cultural heritage	Human Health	Air Quality	Drinking Water Quality	Noise and Vibration	Country Foods	Worker Safety and Health	Recreational or Aesthetic Features	Physical Activity	Healthy Living	Community Health
<b>Operations 1 (cont'd)</b>																												
Environmental management and monitoring	Fish habitat offsetting site monitoring and maintenance																											
Equipment fleet	Mine site mobile equipment (excluding mining fleet) and vehicle use																											
Fuel supply, storage and distribution	Fuel storage and distribution																											
Mining	Mine pit operations: blast, shovel and haul																											
Ore processing	Ore crushing, milling, conveyance and processing																											
Potable water supply	Process and potable water supply, distribution and storage																											
Power supply	Backup diesel generators																											
	Electrical power distribution																											
Processing	Plant operation: mill building, truck shop, warehouse and pipelines																											
Procurement and labour	Employment and labour																											
	Procurement of goods and services																											
Rail load-out facility	Rail-load out activity (loading of concentrate; movement of rail cars on siding)																											
Reclamation and decommissioning	Progressive mine reclamation																											
Stockpiles	Construction of Non-PAG tailings beaches																											
	Construction of PAG and Non-PAG low-grade ore stockpile																											
	Non-PAG waste rock stockpiling																											
	Overburden stockpiling																											
Tailings management	Reclaim barge and pumping from TMF to Plant Site																											
	South TMF embankment construction																											
	Sub-aqueous deposition of PAG waste rock into TMF																											
	Tailings transport and storage in TMF																											
	Treatment and recycling of supernatant TMF water																											
Traffic	Traffic delivering equipment, materials and personnel to site																											
Waste disposal	Waste management: garbage and sewage waste facilities																											
Water management	Monitoring and maintenance of mine drainage and seepage																											
	Surface water management and diversions systems including snow stockpiling/clearing																											
<b>Operations 2 Includes the Operations 1 non-mining Project Components and Activities, with the addition of these activities:</b>																												
Processing	Low-grade ore crushing, milling and processing																											
Reclamation and decommissioning	Partial reclamation of Non-PAG waste rock stockpile																											
	Partial reclamation of TMF tailings beaches and embankments																											
Tailings management	Construction of North TMF embankment and beach																											
	Deposit of low-grade ore tailings into open pit																											
Water management	Surface water management																											
<b>Closure</b>																												
Environmental management and monitoring	Environmental monitoring including surface and groundwater monitoring																											
	Monitoring and maintenance of mine drainage, seepage, and discharge																											
	Reclamation monitoring and maintenance																											
Open pit	Filling of open pit with water and storage of water as a pit lake																											
Procurement and labour	Employment and labour																											
	Procurement of goods and services																											
Reclamation and decommissioning	Decommissioning of rail concentrate loadout area																											
	Partial decommissioning and reclamation of mine site roads																											

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<b>Closure (cont'd)</b>																												
Reclamation and decommissioning	Decommissioning and removal of plant site, processing plant and mill, substation, conveyor, primary crusher, and ancillary infrastructure (e.g., explosives facility, truck shop)																											
	Decommissioning of diversion channels and distribution pipelines																											
	Decommissioning of reclaim barge																											
	Reclamation of Non-PAG LGO stockpile, overburden stockpile and Non-PAG waste rock stockpile																											
	Reclamation of TMF embankments and beaches																											
	Removal of contaminated soil																											
	Use of topsoil for reclamation																											
Stockpiles	Storage of waste rock in the non-PAG waste rock stockpile																											
Tailings management	Construction and activation of TMF closure spillway																											
	Maintenance and monitoring of TMF																											
	Storage of water in the TMF and groundwater seepage																											
	Sub-aqueous tailing and waste rock storage in TMF																											
	TMF discharge to T-Creek																											
Waste disposal	Solid waste management																											
<b>Post-Closure</b>																												
Environmental management and monitoring	Environmental monitoring including surface and groundwater monitoring																											
	Monitoring and maintenance of mine drainage, seepage, and discharge																											
	Reclamation monitoring and maintenance																											
Open pit	Construction of emergency spillway on open pit																											
	Storage of water as a pit lake																											
Procurement and labour	Procurement of goods and services																											
Stockpiles	Storage of waste rock in the non-PAG waste rock stockpile																											
Tailings management	Storage of water in the TMF and groundwater seepage																											
	Sub-aqueous tailing and waste rock storage																											
	TMF discharge																											

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