

MT SHAMROCK QUARRY - ENVIRONMENTAL HAZARDS REGISTER

Process	Operation/Activity	Significant Environmental Hazard	Actual/Potential Impact(s)	SHE Standard Control Procedure	Site-Specific Management Controls	
Quarry Development	Land disturbance during removal of overburden	Machinery noise	Noise annoyance	SHE Guideline 3.17 - Noise; 3.25 - Noise	Noise Management Plan	
		Dust creation	Nuisance off-site dust Impaired visual amenity	SHE Guideline 3.22 - Dust other than Silica	Dust Management Plan	
		Sediment in run-off	Impaired waterway quality Erosion and soil loss	SHE Guideline 4.4 - Eriery & Resource Conservation	Dust Management Plan; EMP s.2.4 - Surface Water, Groundwater & Drainage	
		Fossil fuel combustion	GHG-induced global warming Waste of resources	SHE Guideline 4.4 - Eriery & Resource Conservation	Eriery Action Plan	
		Fueloil spillage	Impaired waterway quality Land contamination Waste of resources	-	Emergency Procedures Flp Chart - Spill Response	
		Artefact destruction	Loss of heritage values	-	EMP s.2.9 - Cultural Heritage	
		Vegetation removal during removal of overburden	Vegetation removal	Terrestrial flora and fauna losses	SHE Guideline 4.2.7 - Land Protection, Management & Rehabilitation	No control prepared.
			Disposal of vegetation	Waste of resources	-	No control prepared.
			Soil exposure	Impaired waterway quality Erosion and soil loss	SHE Guideline 4.4 - Eriery & Resource Conservation	Dust Management Plan; EMP s.2.4 - Surface Water, Groundwater & Drainage
			Relocation of weed seeds	Weed proliferation	SHE Guideline 4.2.7 - Land Protection, Management & Rehabilitation	No control prepared.
	Storage of soil and overburden	Introduction of weeds from machinery	Weed proliferation	SHE Guideline 4.2.7 - Land Protection, Management & Rehabilitation	No control prepared.	
		Exposed surfaces creating dust	Nuisance off-site dust	SHE Guideline 3.22 - Dust other than Silica	Dust Management Plan	
		Exposed surfaces creating polluted run-off	Impaired waterway quality Erosion and sedimentation	SHE Guideline 4.4 - Eriery & Resource Conservation	Dust Management Plan; EMP s.2.4 - Surface Water, Groundwater & Drainage	
		Weed growth	Weed proliferation	SHE Guideline 4.2.7 - Land Protection, Management & Rehabilitation	No control prepared.	
Drilling & Blasting	Blasting of hard rock	Timing & communication	Nuisance ground and air vibrations	SHE Guideline 3.18 - Blasting & Explosives	Quarry Blasting Procedure	
		Charge management	Noise annoyance Slope instability GHG-induced global warming	SHE Guideline 3.17 - Noise; 3.25 - Noise SHE Guideline 3.18 - Blasting & Explosives		
		Dust creation	Nuisance off-site dust Impaired visual amenity	SHE Guideline 3.22 - Dust other than Silica		
Load & Haul	Land disturbance and removal/operation of machinery	Machinery noise	Noise annoyance	SHE Guideline 3.17 - Noise; 3.25 - Noise	Noise Management Plan	
		Dust creation	Nuisance off-site dust	SHE Guideline 3.22 - Dust other than Silica	Dust Management Plan	
		Sediment in run-off	Impaired waterway quality	SHE Guideline 4.4 - Eriery & Resource Conservation	Eriery Action Plan	
		Fossil fuel combustion	GHG-induced global warming Waste of resources	SHE Guideline 4.4 - Eriery & Resource Conservation	Emergency Procedures Flp Chart - Spill Response	
		Fueloil spillage	Impaired waterway quality Land contamination Waste of resources	-	Emergency Procedures Flp Chart - Spill Response	
Crush & Screen	Crushing & Screening	Machinery noise	Noise annoyance	SHE Guideline 3.17 - Noise; 3.25 - Noise	Noise Management Plan	
		Dust creation	Nuisance off-site dust	SHE Guideline 3.22 - Dust other than Silica	Dust Management Plan	
		Sediment in run-off	Impaired waterway quality	SHE Guideline 4.4 - Eriery & Resource Conservation	Dust Management Plan; EMP s.2.4 - Surface Water, Groundwater & Drainage	
	Hazardous materials and flammable substances	Fueloil spillage	Impaired waterway quality Land contamination Waste of resources	SHE Guideline 4.4 - Eriery & Resource Conservation	Emergency Procedures Flp Chart - Spill Response	
Stockpiling	Stockpiling of materials	Machinery noise	Noise annoyance	SHE Guideline 3.17 - Noise; 3.25 - Noise	Noise Management Plan	
		Dust creation	Nuisance off-site dust Impaired visual amenity	SHE Guideline 3.22 - Dust other than Silica	Dust Management Plan	
		Sediment in run-off	Impaired waterway quality	SHE Guideline 4.4 - Eriery & Resource Conservation	Dust Management Plan; EMP s.2.4 - Surface Water, Groundwater & Drainage	
		Fossil fuel combustion	GHG-induced global warming Waste of resources	SHE Guideline 4.4 - Eriery & Resource Conservation	Eriery Action Plan	
		Fueloil spillage	Impaired waterway quality Land contamination Waste of resources	-	Emergency Procedures Flp Chart - Spill Response	
Load Out & Weighbridge Despatch	Movement of material and trucks - Internal & External	Machinery noise	Noise annoyance	SHE Guideline 3.17 - Noise; 3.25 - Noise	Noise Management Plan	
		Dust creation from vehicle loading/movement	Nuisance off-site dust	SHE Guideline 3.22 - Dust other than Silica	Dust Management Plan	
		Sediment deposition to roadways	Damage to other vehicles	No control prepared.	EMP s.2.7 - Traffic Management	
		Fossil fuel combustion	GHG-induced global warming	SHE Guideline 4.4 - Eriery & Resource Conservation	Eriery Action Plan	
		Fueloil spillage	Impaired waterway quality Land contamination Waste of resources	SHE Guideline 4.4 - Eriery & Resource Conservation	Emergency Procedures Flp Chart - Spill Response	
Water Management	Stormwater harvesting, storage & treatment	Sediment build-up in ponds	Impaired water treatment	SHE Guideline 4.2.4 - Water Management	EMP s.2.4 - Surface Water, Groundwater & Drainage	
		Algal growth	Impaired waterway quality			
	Insufficient storage capacity	Impaired waterway quality				
	Stormwater discharge	Volume exceeds licence condition Water quality exceeds licence limits	EPA Licence breach - fine			
Groundwater surveillance	Excessive groundwater inflows	Impaired waterway quality				
Vehicle & Plant Maintenance	Servicing of plant and equipment	Generation, storage & disposal - solid waste	Waste of resources Impaired waterway quality Use of landfilling	SHE Guidelines 4.4 - Eriery & Resource Conservation 4.2.6 - Management of Waste	EMP s.2.12 - Waste Management & Minimisation	
		Generation, storage & disposal - liquid waste	Waste of resources Impaired waterway quality Use of landfilling	SHE Guidelines 3.20 - Hazardous Substances Handling & Storage; 4.2.6 - Management of Waste		
	Use of lighting, heating and tools	Excessive power use	GHG-induced global warming	SHE Guideline 4.4 - Eriery & Resource Conservation	Eriery Action Plan	
Storage and Handling of Liquid Fuels & Chemicals	Fueloil storage	Fueloil spillage	Impaired waterway quality Land contamination Waste of resources	SHE Guideline 3.20 - Hazardous Substances Handling & Storage	EMP s.2.14 - Storage & Handling Controls	
		Fueloil handling	Impaired waterway quality Land contamination Waste of resources	SHE Guideline 3.20 - Hazardous Substances Handling & Storage		
	Refuelling of plant and equipment	Fueloil spillage	Impaired waterway quality Land contamination Waste of resources	SHE Guideline 3.20 - Hazardous Substances Handling & Storage	Emergency Procedures Flp Chart - Spill Response	
		Plant & equipment operated sub-optimally	GHG-induced global warming Waste of resources	SHE Guideline 4.4 - Eriery & Resource Conservation	Eriery Action Plan	
Land Management & Weed/Erosion Control	Blasting & vibration	Landslips	Impaired visual amenity Erosion and soil loss Impaired waterway quality	SHE Guideline 4.2.7 - Land Protection, Management & Rehabilitation	Landscape & Rehabilitation Management Plan	
		Net Gain Off-Set Planting	Unsuccessful planting, high attrition rate	SHE Guideline 4.2.4 - Water Management		
		Decline in vegetation quality over time	Reduced habitat Impaired catchment drainage	SHE Guideline 4.2.7 - Land Protection, Management & Rehabilitation		
	Weed Management	Uncontrolled weed growth and spread	SHE Guideline 4.2.7 - Land Protection, Management & Rehabilitation			
	Drainage line revegetation	Sediment in run-off	Impaired waterway quality	EMP s.2.4 - Surface Water, Groundwater & Drainage		
Office Usage	Office & Ablation facilities	Office waste generation and storage	Waste of resources Use of landfilling	EMP s.2.12 - Waste Management & Minimisation		
		Excessive heating, lighting and power use	GHG-induced global warming	Eriery Action Plan		
		Excessive use of mains water	Waste of resources	EMP s.2.11 - Water Conservation		
		Black & greywater spill/overflow	Impaired waterway quality	EMP s.2.12 - Waste Management & Minimisation		