

fgf Hazard and Risk Register - ENVIRONMENTAL

Environmental Aspect	Process Line Model												Potential Hazard	Consequence	Initial Risk			Administrative Control Measures (Taking into Consideration the Hierarchy of Controls)	Behavioural Control Measures (Taking into Consideration the Hierarchy of Controls)	Physical Control Measures (Taking into Consideration the Hierarchy of Controls)	Controlled Risk		
	Concrete Works	Earth Works	Pavements	Storm Water	Sewerage Reticulation	Water Reticulation	Quarry Earth Works & Extraction	Crushing / Processing	Spray Seal	Asphalt Pavements	Depot and Workshop	Transport of Bitumen or Quarry products			L	C	RR				L	C	RR
Air Quality	x	x	x	x			x	x	x	x	x	x	Fumes and dust generated by earthworks, crushing and during the transport of quarried products. Dust can be generated from earthworks, stockpiling fill and transporting fill. Activities at the site have the potential to create large amounts of dust which could affect flora and fauna.	Reduced air quality and visibility. Potential health and environmental productivity impacts. Potential to carry contaminates to adjacent surface and stormwater.	Unlikely	Moderate	M-16	ENVI 02: Air Quality ENVI 09: Water Quality	Education and Site Inductions Site Inspections and Monitoring Environmental Awareness Training	All disturbed works to be regularly watered during dry and windy weather to prevent formation of dust. Use of wheel shakers to minimise dirt tracked onto bitumen roads. Remove dirt tracked onto roads removed by rotary sweeping or washing down. Clean fuel and air filter elements along with regular maintenance of fuel injection systems.	Rare	Minor	L-23
Hazardous Substances	x	x	x	x	x	x	x	x	x	x	x	x	Handling, use, transportation and storage hazardous substances have the potential to harm personnel and affect receiving environments if spilt or disposed of incorrectly.	The uncontrolled release of hazardous substances have the potential to contaminate land. In addition, spills and poor hazardous substance waste management may have a persistent toxic effect on both terrestrial and aquatic ecosystems.	Possible	Major	H-8	ENVI 06: Hazardous Substances	Education and Site Inductions Site Inspections and Monitoring Environmental Awareness Training	Secure lids on all hazardous substances and materials. Do not use hazardous substance and materials near water ways. Constructing and implemenation of bunds. Installation of silt curtains into waterways. Rock check dams.	Possible	Insignificant	L-22
Noise and Vibration	x	x	x	x			x	x	x	x	x	x	The major potential generation of noise during the construction / extraction period is the operation of vehicles, plant and equipment, trucks, earthmovers and jackhammers. Ground vibrations generated during construction with particular reference to vibratory compaction have the potential to cause damage to property and/or nuisance-particularly for sensitive receptors.	Excessive and disturbing noise and vibration cause environmental nuisance and have the potential to disrupt normal activity. This includes a reduced ability to communicate and concentrate, and increases in anxiety. Noise and vibration may also have detrimental health effects such as hearing impairment, cardiovascular, skeletalomuscular and mental health effects and may affect the breeding, feeding and roosting patterns of fauna.	Unlikely	Moderate	M-16	ENVI 05: Fauna and Flora ENVI 07: Noise and Vibration	Education and Site Inductions Site Inspections and Monitoring Dilapidation reports Environement Awareness Training	Locate equipment e.g. compressors away from sensitive areas. Only run noisy equipment when required. Turn reversing alarms to low tone where able. Limit work to hours specified by local by-laws. Vibratory machinery not to be used within close proximity of buildings.	Unlikely	Minor	L-21
Waste Management	x	x	x	x	x	x	x	x	x	x	x	x	The potential still exists for litter from workers to impact upon the habitat conditions of local flora and fauna. Refuse, construction, sanitary and equipment waste should always be disposed of correctly. Decomposing plant material stored on site can produce contaminants.	Waste contributes to landfill volume, attracts vermin, has the potential to harbour / spread disease and contribute to greenhouse gas emissions. Poor waste management also contributes to visual disamenty and may cause harm to fauna and flora.	Likely	Moderate	H-9	ENVI 08: Waste Management	Education and Site Inductions Site Inspections and Monitoring Environmental Awareness Training	Provisions on site for the disposal of general refuse such as personal litter. Removal of hazardous waste in accordance with Safety Data Sheets, DEHP requirements and local by-laws	Possible	Minor	M-17