

Environmental impact statement

Taking the assessment of potential impacts into account, herewith please receive an environmental impact statement that summarises the impact that the proposed activity may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

ENVIRONMENTAL IMPACT STATEMENT			
<u>SITE ALTERNATIVE 1</u>			
<u>TYPE OF IMPACT</u>	<u>Duration</u>	<u>Likelihood</u>	<u>Significance</u>
<p><u>Site Establishment & Infrastructure Development:</u></p> <ul style="list-style-type: none"> ■ Alteration of the agricultural sense of place; ■ Loss of agricultural land for duration of mining; ■ Visual intrusion as a result of site establishment; ■ Potential impact on fauna within the footprint area; ■ Potential impact on archaeological artefacts; ■ Potential impact on areas of palaeontological concerns. ■ Dust nuisance as a result of the disturbance of soil during site establishment ■ Noise nuisance generated by earthmoving machinery 	<p>Duration of site establishment phase (±1 month)</p>	<p>Definite</p> <p>Definite</p> <p>Low Possibility</p> <p>Low Possibility</p> <p>Low Possibility</p> <p>Low Possibility</p> <p>Low Possibility</p>	<p>Medium Concern</p> <p>Medium Concern</p> <p>Low Concern</p> <p>Low Concern</p> <p>Low- Concern</p> <p>Low- Concern</p> <p>Low- Concern</p>

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<ul style="list-style-type: none"> ■ Potential contamination of footprint area and surface runoff as a result of hydrocarbon spillages during site establishment ■ Potential contamination of water resources during site establishment ■ Potential contamination of environment due to improper waste management during site establishment ■ Infestation of the topsoil heaps and mining area with weeds or invader plant species ■ New job opportunities as a result of the mining operation (Positive Impact) 		<p>Low Possibility</p> <p>Low Possibility</p> <p>Low Possibility</p> <p>Low Possibility</p> <p>Definite (+)</p>	<p>Low- Medium Concern</p> <p>Low- Concern</p> <p>Low- Concern</p> <p>Low- Concern</p> <p>High (+)</p>
<p><u>Operational Phase: Drilling and Blasting, Diamond wire cutting, loading and hauling of the mined material from site:</u></p> <ul style="list-style-type: none"> ■ Health and safety risk posed by drilling and blasting activities; ■ Dust nuisance caused by drilling and blasting activities; ■ Noise nuisance as a result of drilling and blasting; ■ Dust nuisance due to excavation and from diamond wire cutting, loading and hauling of the mined material from site; ■ Noise nuisance as a result of the diamond wire cutting, loading and 	<p>Duration of operational phase (5 years maximum)</p>	<p><u>Likelihood</u></p> <p>Low Possibility</p> <p>Low Possibility</p> <p>Low Possibility</p> <p>Possible</p> <p>Low Possibility</p>	<p><u>Significance</u></p> <p>Low Concern</p> <p>Low Concern</p> <p>Low-Medium Concern</p> <p>Low-Medium Concern</p> <p>Low-Medium Concern</p>

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<ul style="list-style-type: none"> hauling of the mined material from site; ■ Unsafe working environment for employees; ■ Soil contamination from hydrocarbon spills and/or littering; ■ Potential impact on areas of palaeontological concern; ■ Facilitation of erosion due to mining activities; 		<p>Low Possibility</p> <p>Low Possibility</p> <p>Low Possibility</p> <p>Low Possibility</p>	<p>Low-Medium Concern</p> <p>Low-Medium Concern</p> <p>Low Concern</p> <p>Low-Medium Concern</p>
<p><u>Processing, stockpiling and transporting of material:</u></p> <ul style="list-style-type: none"> ■ Dust nuisance generated at the processing plant; ■ Noise nuisance stemming from operation of the processing plant; ■ Potential contamination of environment due to improper waste management; ■ Overloading of trucks impacting road infrastructure; ■ Degradation of the access road; 	<p>Duration of operational phase (5 years maximum)</p>	<p><u>Likelihood</u></p> <p>Low Possibility</p> <p>Low Possibility</p> <p>Low Possibility</p> <p>Low Possibility</p> <p>Low Possibility</p>	<p><u>Significance</u></p> <p>Low Concern</p> <p>Low Concern</p> <p>Low – Medium Concern</p> <p>Low - Medium Concern</p> <p>Low - Medium Concern</p>
<p><u>Cumulative Impacts:</u></p> <ul style="list-style-type: none"> ■ Impact the broad-scale ecological processes. ■ Impact on existing infrastructure as a direct result of the mining operation. 	<p>Duration of operational phase (5 years maximum)</p>	<p><u>Likelihood</u></p> <p>Low Possibility</p> <p>Low Possibility</p>	<p><u>Significance</u></p> <p>Low Concern</p> <p>Low Concern</p>

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<u>Sloping and Landscaping during Rehabilitation:</u>	Duration of decommissioning phase (±1 month)	<u>Likelihood</u>	<u>Significance</u>
<ul style="list-style-type: none"> ■ Safety risk posed by un-sloped areas; 		Possible	Medium Concern
<ul style="list-style-type: none"> ■ Erosion of returned topsoil after rehabilitation; 		Low Possibility	Low - Medium Concern
<ul style="list-style-type: none"> ■ Infestation of the reinstated areas by weeds and invader plant species; 		Low Possibility	Low - Medium Concern
<ul style="list-style-type: none"> ■ Potential impact associated with litter/waste left at the mining area. 		Low Possibility	Low Concern
<ul style="list-style-type: none"> ■ Potential impact associated with litter/waste left at the mining area 		Low Possibility	Low - Medium Concern
<ul style="list-style-type: none"> ■ Potential contamination of water resources during rehabilitation 		Low Possibility	Low - Medium Concern
<ul style="list-style-type: none"> ■ Potential contamination of environment due to improper waste management 		Low Possibility	Low - Medium Concern
<ul style="list-style-type: none"> ■ Potential impact on local fauna due to disturbance and loss of available habitat during rehabilitation 		Low Possibility	Low - Medium Concern
<ul style="list-style-type: none"> ■ Return of the mining area to agricultural use upon closure (Positive Impact) 		Definite (+)	Medium-High (+)