



Identifier	Discipline	Impact	Phase	Pre-Mitigation Significance	Post-Nature	Post-Extent	Post-Duration	Post-Magnitude	Post-Reversibility	Consequence2	Post-Probability	Post-mitigation Significance Score	Post-Mitigation Significance	Confidence	Cumulative Impact	Irreplaceable loss	Priority Factor	Final score
AQ1	Climate and Air Quality (AQ)	Minimal generation of dust and vehicle emissions from leveling of ground, and vehicle movement	Construction	Low -	-1	2	1	1	1	-1,25	2	-2,5	Low -	High	1	1	1,00	-2,50
AQ2	Climate and Air Quality (AQ)	Minimal generation of dust and emissions from vehicle movement during inspection and maintenance activities	Operation	Low -	-1	2	1	1	1	-1,25	2	-2,5	Low -	High	1	1	1,00	-2,50
G1	Geology and Soils (G)	Soil Compaction and Erosion	Construction	Medium to low -	-1	1	1	1	2		3	-3,75	Low -	Medium	1	1	1,00	-3,75
G2	Geology and Soils (G)	Negligible pollution of soils through minor spills from equipment/vehicles on site	Construction	Low -	-1	1	1	1	1		1	-1	Low -	Medium	1	1	1,00	-1,00
G3	Geology and Soils (G)	Soil Compaction and Erosion	Operation	Medium to low -	-1	1	1	1	2		3	-3,75	Low -				#N/A	#N/A
G4	Geology and Soils (G)	Negligible pollution of soils through minor spills from equipment/vehicles on site	Operation	Low -	-1	1	1	1	1		1	-1	Low -	Medium	1	1	1,00	-1,00
G5	Geology and Soils (G)	Soil Compaction and Erosion	Decommissioning	Medium to low -	-1	1	1	1	2		3	-3,75	Low -	Medium	1	1	1,00	-3,75
W1	Surface water / wetlands (W)	Indirect loss, disturbance and degradation of wetlands	Construction	Medium to low -	-1	1	1	1	1	-1	2	-2	Low -	High	2	1	1,13	-2,25
W2	Surface water / wetlands (W)	Increased bare surfaces, runoff and potential for erosion	Construction	Medium to low -	-1	2	1	2	2	-1,75	2	-3,5	Low -	High	2	1	1,13	-3,94
W3	Surface water / wetlands (W)	Degradation of wetland vegetation and the introduction and spread of alien and invasive vegetation	Construction	Medium to low -	-1	2	1	2	2	-1,75	2	-3,5	Low -	High	2	1	1,13	-3,94
W4	Surface water / wetlands (W)	Contamination of wetlands with hydrocarbons due to machinery leaks and other waste	Construction	Medium to low -	-1	2	1	2	2	-1,75	2	-3,5	Low -	High	2	1	1,13	-3,94
W5	Surface water / wetlands (W)	Alteration of hydrological regime at drainage feature crossing	Construction	Medium to low -	-1	1	1	2	2	-1,5	2	-3	Low -	High	2	1	1,13	-3,38
W6	Surface water / wetlands (W)	Increased dirty/processed water inputs nearby wetlands due to leakage	Operation	Medium to low -	-1	2	2	2	2	-2	2	-4	Low -	High	2	1	1,13	-4,50
W7	Surface water / wetlands (W)	Degradation of wetland vegetation and proliferation of alien and invasive species	Decommissioning	Medium to low -	-1	2	1	2	2	-1,75	2	-3,5	Low -	High	2	1	1,13	-3,94
W8	Surface water / wetlands (W)	Disruption of wetland soil profile, hydrological regime and increased sediment loads	Decommissioning	Medium to low -	-1	2	1	2	2	-1,75	2	-3,5	Low -	High	2	1	1,13	-3,94
N1	Noise (N)	Generation of noise through construction activities	Construction	Medium to low -	-1	1	1	1	1	-1	4	-4	Low -	High	1	1	1,00	-4,00
N2	Noise (N)	Generation of noise through increased traffic and movement along access route	Construction	Medium to low -	-1	2	1	1	2	-1,5	2	-3	Low -	High	1	1	1,00	-3,00
N3	Noise (N)	Generation of noise through maintenance, inspections, and calibrations	Operation	Medium to low -	-1	1	1	1	1	-1	4	-4	Low -	High	1	1	1,00	-4,00
N4	Noise (N)	Generation of noise through increased traffic and movement along access route	Operation	Medium to low -	-1	2	1	1	2	-1,5	2	-3	Low -	High	1	1	1,00	-3,00
N5	Noise (N)	Generation of noise during decommissioning/dismantling/removal of pipeline from site	Decommissioning	Medium to low -	-1	1	1	1	1	-1	4	-4	Low -	High	1	1	1,00	-4,00
TE1	Terrestrial Ecology (TE)	Destruction, further loss and fragmentation of the of habitats, ecosystems and vegetation community	Construction	Medium to high -	-1	2	2	2	2	-2	3	-6	Medium to low -	Medium	2	1	1,13	-6,75
TE2	Terrestrial Ecology (TE)	Introduction of alien and invasive species, especially plants	Construction	Medium to high -	-1	2	2	2	2	-2	3	-6	Medium to low -	Medium	2	1	1,13	-6,75
TE3	Terrestrial Ecology (TE)	Displacement of faunal community due to habitat loss, direct mortalities and disturbance (road collisions, noise, dust, vibration and poaching)	Construction	Medium to high -	-1	2	2	1	2	-1,75	3	-5,25	Medium to low -	Medium	2	1	1,13	-5,91
TE4	Terrestrial Ecology (TE)	Continued fragmentation and degradation of habitats and ecosystems	Operation	Medium to high -	-1	2	4	2	2	-2,5	2	-5	Medium to low -	Medium	2	1	1,13	-5,63
TE5	Terrestrial Ecology (TE)	Potential leaks, discharges, pollutants from pipeline and machinery/storage leaching into the surrounding environment.	Operation	High -	-1	2	4	2	3	-2,75	2	-5,5	Medium to low -	Medium	2	1	1,13	-6,19
TE6	Terrestrial Ecology (TE)	Ongoing displacement and direct mortalities of faunal community (including SCC) due to disturbance (road collisions, noise, light, dust, vibration)	Operation	Medium to high -	-1	2	4	1	2	-2,25	2	-4,5	Medium to low -	Medium	2	1	1,13	-5,06
TE7	Terrestrial Ecology (TE)	Destruction of vegetation, encroachment and displacement of the natural vegetation community and direct mortality of fauna.	Decommissioning	Medium to high -	-1	2	3	2	2	-2,25	2	-4,5	Medium to low -	Medium	2	1	1,13	-5,06
S1	Social (S)	Further development of community through industry growth	Operation	Medium to high +	1	3	4	3	3	3,25	3	9,75	Medium to high +	Medium	2	1	1,13	10,97
S2	Social (S)	Potential future job creation	Operation	Low +	1	3	2	1	1	1,75	2	3,5	Low +	Low	1	1	1,00	3,50
C1	Cultural Heritage (C)	Damage/destruction to unknown archaeological and heritage material	Construction	Low -	1	2	5	1	5	3,25	1	3,25	Low +	Low	1	1	1,00	3,25
C2	Cultural Heritage (C)	Palaeontology: Loss of Fossil Heritage	Construction	Medium to high -	-1	1	5	1	5	-3	1	-3	Low -	Low	1	3	1,25	-3,75
E1	Economic (E)	Economic growth through the sustaining and support of Free State mining activities	Operation	Medium to high +	1	3	4	3	3	3,25	3	9,75	Medium to high +	Medium	2	1	1,13	10,97