IMPACT ASSESSMENT MATRIX

IMPACT DESCRIPTION			PRE - MITIGATION							POST - MITIGATION								IMPACT PRIORITISATION				
Impact	Alternative	Project Phase	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-Mitigation	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-Mitigation	Confidence	Public response	Cumulative Impact	Irreplaceable loss	Priority Factor	Final Significance
Air Quality																						
Air Quality: Decline in Ambient Air Quality	Alternative Shaft (Alt 1)	Construction	-1	3	1	3	2	3	-6,75	-1	3	1	2	2	3	-6	Medium	1	1	1	1,00	-6,00
Air Quality: Decline in Ambient Air Quality	Alternative Shaft (Alt 1)	Operation	-1	3	4	3	3	3	-9,75	-1	3	4	2	2	3	-8,25	Medium	1	1	1	1,00	-8,25
Air Quality: Decline in Ambient Air Quality	Alternative Shaft (Alt 2)	Construction	-1	3	1	3	2	3	-6,75	-1	3	1	2	2	3	-6	Medium	1	1	1	1,00	-6,00
Air Quality: Decline in Ambient Air Quality	Alternative Shaft (Alt 2)	Operation	-1	3	4	3	3	3	-9,75	-1	3	4	2	2	3	-8,25	Medium	1	1	1	1,00	-8,25
Blasting and vibration																						
Blasting and vibration: Ground vibration Impact on houses	Underground Mining (Alt 1)	Operation	-1	2	4	1	1	2	-4	-1	2	4	1	1	2	-4	High	1	1	3	1,33	-5,33
Blasting and vibration: Ground vibration Impact on Eskom powerlines, railways, roads and other surface infrastructure	Underground Mining (Alt 1)	Operation	-1	2	4	1	1	2	-4	-1	2	4	1	1	2	-4	High	1	1	1	1,00	-4,00
Blasting and vibration: Air blast Impact on surface infrastructure	Underground Mining (Alt 1)	Operation	-1	2	4	1	1	1	-2	-1	2	4	1	1	1	-2	High	1	1	3	1,33	-2,67
Blasting and vibration: Fly Rock Impact on surface infrastructure	Underground Mining (Alt 1)	Operation	-1	2	4	1	1	1	-2	-1	2	4	1	1	1	-2	High	1	1	2	1,17	-2,33
Blasting and vibration: Vibration from drilling on raise bore for the ventilation shaft	Alternative Shaft (Alt 1)	Construction	-1	2	2	1	1	1	-1,5	-1	2	2	1	1	1	-1,5	High	1	1	3	1,33	-2,00
Blasting and vibration: Vibration from drilling on raise bore for the ventilation shaft	Alternative Shaft (Alt 2)	Construction	-1	2	2	1	1	1	-1,5	-1	2	2	1	1	1	-1,5	High	1	1	3	1,33	-2,00
Groundwater																						
Groundwater: Groundwater Quality Deterioration: Stockpiles	Underground Mining (Alt 1)	Operation	-1	3	3	2	2	4	-10	-1	2	2	2	2	3	-6	Medium	1	2	2	1,33	-8,00
Groundwater: Groundwater Altered Hydrogeological Regime (Aquifer Drawdown)	Underground Mining (Alt 1)	Operation	-1	3	4	3	3	4	-13	-1	3	4	2	3	3	-9	Medium	2	2	3	1,67	-15,00
Groundwater: Surface Water Contamination	Underground Mining (Alt 1)	Operation	-1	4	3	3	3	4	-13	-1	3	3	3	3	2	-6	Medium	1	2	2	1,33	-8,00
Groundwater: Contamination of Groundwater	Underground Mining (Alt 1)	Operation	-1	3	4	3	4	4	-14	-1	3	3	3	3	3	-9	Medium	1	2	2	1,33	-12,00
Groundwater: Contaminated groundwater seepage to streams (salt load) from Rehabilitated surface areas - Discard, Plant, PCDs, etc	Underground Mining (Alt 1)	Rehab and closure	-1	4	4	3	3	3	-10,5	-1	3	4	2	2	2	-5,5	High	1	1	1	1,00	-5,50
Groundwater: Contamination of streams due to mine decant and weathered aquifer seepage from old mine workings	Underground Mining (Alt 1)	Rehab and closure	-1	4	4	3	4	3	-11,25	-1	4	4	2	4	2	-7	Medium	2	2	2	1,50	-10,50
Groundwater: Contamination of farm boreholes due to mine decant and weathered aquifer seepage from old mine workings	Underground Mining (Alt 1)	Rehab and closure	-1	3	4	3	5	3	-11,25	-1	3	4	2	5	2	-7	Medium	2	2	2	1,50	-10,50
Soil																						
Soil: Degradation and/or loss of soil resources	Alternative Shaft (Alt 1)	Planning	-1	2	1	1	1	1	-1,25	-1	1	2	1	1	1	-1,25	Medium	2	1	2	1,33	-1,67
Soil: Degradation and/or loss of soil resources	Alternative Shaft (Alt 1)	Construction	-1	4	4	4	4	5	-20	-1	3	3	3	3	4	-12	Medium	2	1	2	1,33	-16,00
Soil: Degradation and/or loss of soil resources	Alternative Shaft (Alt 1)	Operation	-1	3	4	3	3	4	-13	-1	2	4	2	2	3	-7,5	High	2	1	2	1,33	-10,00
Soil: Degradation and/or loss of soil resources	Alternative Shaft (Alt 1)	Decommissioning	-1	3	2	3	3	4	-11	-1	3	2	2	3	4	-10	High	2	1	2	1,33	-13,33
Soil: Degradation and/or loss of soil resources	Alternative Shaft (Alt 1)	Rehab and closure	-1	3	4	3	4	3	-10,5	-1	2	3	1	1	2	-3,5	High	2	1	2	1,33	-4,67
Soil: Degradation and/or loss of soil resources	Alternative Shaft (Alt 2)	Planning	-1	2	1	1	1	1	-1,25	-1	1	2	1	1	1	-1,25	High	2	1	2	1,33	-1,67
Soil: Degradation and/or loss of soil resources	Alternative Shaft (Alt 2)	Construction	-1	4	5	4	5	5	-22,5	-1	3	3	4	4	4	-14	High	2	1	2	1,33	-18,67
Soil: Degradation and/or loss of soil resources	Alternative Shaft (Alt 2)	Operation	-1	3	4	4	3	4	-14	-1	2	4	3	3	4	-12	High	2	1	2	1,33	-16,00

IMPACT DESCRIPTION			PRE - MITIGATION							POST - MITIGATION								IMPACT PRIORITISATION				
Impact	Alternative	Project Phase	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-Mitigation	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-Mitigation	Confidence	Public response	Cumulative Impact	Irreplaceable loss	Priority Factor	Final Significance
Soil: Degradation and/or loss of soil resources	Alternative Shaft (Alt 2)	Decommissioning	-1	3	2	4	3	4	-12	-1	3	2	3	3	4	-11	High	2	1	2	1,33	-14,67
Soil: Degradation and/or loss of soil resources	Alternative Shaft (Alt 2)	Rehab and closure	-1	3	4	3	4	3	-10,5	-1	2	3	1	1	2	-3,5	High	2	1	2	1,33	-4,67
Soil: Degradation and/or loss of soil resources	Powerline (Alt 1)	Planning	-1	2	1	1	1	1	-1,25	-1	1	2	1	1	1	-1,25	Medium	1	1	1	1,00	-1,25
Soil: Degradation and/or loss of soil resources	Powerline (Alt 1)	Construction	-1	4	2	4	3	4	-13	-1	3	4	3	3	3	-9,75	High	1	1	1	1,00	-9,75
Soil: Degradation and/or loss of soil resources	Powerline (Alt 1)	Operation	-1	1	4	2	3	2	-5	-1	1	4	2	3	2	-5	High	1	1	1	1,00	-5,00
Soil: Degradation and/or loss of soil resources	Powerline (Alt 1)	Decommissioning	-1	2	2	3	3	3	-7,5	-1	2	2	3	3	3	-7,5	High	1	1	1	1,00	-7,50
Soil: Degradation and/or loss of soil resources	Powerline (Alt 1)	Rehab and closure	-1	3	4	3	3	3	-9,75	-1	2	3	1	1	2	-3,5	Medium	1	1	1	1,00	-3,50
Soil: Degradation and/or loss of soil resources	Powerline (Alt 2)	Planning	-1	2	1	1	1	1	-1,25	-1	1	2	1	1	1	-1,25	Medium	1	1	1	1,00	-1,25
Soil: Degradation and/or loss of soil resources	Powerline (Alt 2)	Construction	-1	4	2	4	3	4	-13	-1	3	4	3	3	3	-9,75	High	1	1	1	1,00	-9,75
Soil: Degradation and/or loss of soil resources	Powerline (Alt 2)	Operation	-1	1	4	2	3	2	-5	-1	1	4	2	3	2	-5	High	1	1	1	1,00	-5,00
Soil: Degradation and/or loss of soil resources	Powerline (Alt 2)	Decommissioning	-1	2	2	3	3	3	-7,5	-1	2	2	3	3	3	-7,5	High	1	1	1	1,00	-7,50
Soil: Degradation and/or loss of soil resources	Powerline (Alt 2)	Rehab and closure	-1	3	4	3	3	3	-9,75	-1	2	3	1	1	2	-3,5	Medium	1	1	1	1,00	-3,50
Soil: Degradation and/or loss of soil resources	Underground Mining (Alt 1)	Planning	-1	2	1	1	1	1	-1,25	-1	1	2	1	1	1	-1,25	Medium	1	1	1	1,00	-1,25
Soil: Degradation and/or loss of soil resources	Underground Mining (Alt 1)	Construction	-1	3	4	3	3	3	-9,75	-1	3	4	3	3	3	-9,75	High	1	1	1	1,00	-9,75
Soil: Degradation and/or loss of soil resources	Underground Mining (Alt 1)	Operation	-1	3	4	3	3	3	-9,75	-1	3	4	3	3	3	-9,75	High	1	1	1	1,00	-9,75
Soil: Degradation and/or loss of soil resources	Underground Mining (Alt 1)	Decommissioning	-1	3	4	4	3	3	-10,5	-1	3	4	3	3	3	-9,75	High	1	1	1	1,00	-9,75
Soil: Degradation and/or loss of soil resources	Underground Mining (Alt 1)	Rehab and closure	-1	2	2	4	4	4	-12	-1	1	2	1	1	1	-1,25	Medium	1	1	1	1,00	-1,25
Hydropedological services																						
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Alternative Shaft (Alt 1)	Planning	-1	1	1	1	1	1	-1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Alternative Shaft (Alt 1)	Construction	-1	2	3	2	2	4	-9	-1	2	2	2	2	3	-6	High	1	1	1	1,00	-6,00
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Alternative Shaft (Alt 1)	Operation	-1	2	3	2	2	4	-9	1	2	2	2	2	2	4	High	1	1	1	1,00	4,00
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Alternative Shaft (Alt 1)	Decommissioning	-1	2	2	2	2	2	-4	1	2	2	2	2	2	4	High	1	1	1	1,00	4,00
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Alternative Shaft (Alt 1)	Rehab and closure	-1	2	2	2	2	2	-4	1	1	1	1	2	2	2,5	High	1	1	1	1,00	2,50
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Alternative Shaft (Alt 2)	Planning	-1	1	1	1	1	1	-1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Alternative Shaft (Alt 2)	Construction	-1	2	3	2	2	4	-9	-1	2	2	2	2	3	-6	High	1	1	1	1,00	-6,00
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Alternative Shaft (Alt 2)	Operation	-1	2	3	2	2	4	-9	-1	2	2	2	2	3	-6	High	1	1	1	1,00	-6,00
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Alternative Shaft (Alt 2)	Decommissioning	-1	2	2	2	2	2	-4	1	2	2	2	2	2	4	High	1	1	1	1,00	4,00
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Alternative Shaft (Alt 2)	Rehab and closure	-1	2	2	2	2	2	-4	1	1	1	1	2	2	2,5	High	1	1	1	1,00	2,50

IMPACT DESCRIPTION			PRE - MITIGATION							POST - MITIGATION								IMPACT PRIORITISATION				
Impact	**Alternative**	**Project Phase**	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-Mitigation	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-Mitigation	Confidence	Public response	Cumulative Impact	Irreplaceable loss	Priority Factor	Final Significance
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Underground Mining (Alt 1)	Planning	-1	2	2	3	3	3	-7,5	1	1	1	1	2	2	2,5	High	1	1	2	1,17	2,92
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Underground Mining (Alt 1)	Operation	-1	2	2	3	3	2	-5	-1	1	1	1	2	2	-2,5	High	1	1	1	1,00	-2,50
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Underground Mining (Alt 1)	Decommissioning	-1	2	2	2	2	2	-4	1	1	1	2	2	2	3	High	1	1	1	1,00	3,00
Hydropedological services: Loss / degradation of hydropedological drivers to wetlands	Underground Mining (Alt 1)	Rehab and closure	-1	2	2	2	2	2	-4	1	1	1	2	2	1	1,5	High	1	1	1	1,00	1,50
Traffic:																						
Traffic: Road Traffic Safety	Underground Mining (Alt 1)	Construction	-1	4	2	3	5	4	-14	-1	3	1	1	1	2	-3	High	1	1	1	1,00	-3,00
Traffic: Road Traffic Safety	Underground Mining (Alt 1)	Operation	-1	4	4	5	5	5	-22,5	-1	3	3	2	2	2	-5	High	1	2	2	1,33	-6,67
Traffic: Road Traffic Safety	Underground Mining (Alt 1)	Rehab and closure	-1	4	5	5	5	5	-23,75	-1	2	4	3	2	2	-5,5	High	1	3	3	1,67	-9,17
Heritage and Palaeontology																						
Heritage and Paleontological: Destruction of heritage Structures	Powerline (Alt 1)	Construction	-1	2	4	2	5	2	-6,5	-1	1	4	2	5	1	-3	Medium	1	2	3	1,50	-4,50
Heritage and Paleontological: Loss of fossil heritage	Alternative Shaft (Alt 1)	Construction	-1	2	4	4	5	2	-7,5	-1	2	4	2	5	1	-3,25	Medium	1	2	3	1,50	-4,88
Heritage and Paleontological: Loss of fossil heritage	Alternative Shaft (Alt 2)	Construction	-1	2	4	4	5	2	-7,5	-1	2	4	2	5	1	-3,25	Medium	1	2	3	1,50	-4,88
Heritage and Paleontological: Loss of fossil heritage	Underground Mining (Alt 1)	Operation	-1	2	4	4	5	2	-7,5	-1	2	4	2	5	1	-3,25	Medium	1	2	3	1,50	-4,88
Heritage and Paleontological: Impact on burial grounds	Powerline (Alt 1)	Construction	-1	2	4	5	5	1	-4	-1	1	4	2	5	1	-3	Medium	1	2	3	1,50	-4,50
Socio-economic																						
Socio-economic: Safety and Security (i.e. access to properties, theft, fire hazards, etc	Underground Mining (Alt 1)	Planning	-1	2	2	1	1	3	-4,5	-1	2	2	2	1	2	-3,5	Medium	1	1	1	1,00	-3,50
Socio-economic: Safety and Security (i.e. access to properties, theft, fire hazards, etc	Underground Mining (Alt 1)	Operation	-1	2	3	3	2	3	-7,5	-1	2	2	2	3	2	-4,5	Medium	1	1	1	1,00	-4,50
Socio-economic: Safety and Security (i.e. access to properties, theft, fire hazards, etc	Underground Mining (Alt 1)	Rehab and closure	-1	2	2	2	2	2	-4	-1	1	2	2	2	2	-3,5	Medium	1	1	1	1,00	-3,50
Socio-economic: Safety and Security (i.e. access to properties, theft, fire hazards, etc	Underground Mining (Alt 1)	Decommissioning	-1	2	2	2	2	2	-4	-1	1	2	2	2	2	-3,5	Medium	1	1	1	1,00	-3,50
Socio-economic: Impact on Existing Infrastructure (i.e. roads, fences, etc.)	Underground Mining (Alt 1)	Planning	-1	2	2	1	2	3	-5,25	-1	2	2	2	2	2	-4	Medium	1	1	1	1,00	-4,00
Socio-economic: Impact on Existing Infrastructure (i.e. roads, fences, etc.)	Underground Mining (Alt 1)	Construction	-1	2	2	3	2	3	-6,75	-1	2	2	2	2	2	-4	Medium	1	1	1	1,00	-4,00
Socio-economic: Impact on Existing Infrastructure (i.e. roads, fences, etc.)	Underground Mining (Alt 1)	Rehab and closure	-1	2	2	3	2	3	-6,75	-1	2	2	2	3	2	-4,5	Medium	1	1	1	1,00	-4,50
Socio-economic: Impact on Existing Infrastructure (i.e. roads, fences, etc.)	Underground Mining (Alt 1)	Operation	-1	2	2	2	2	2	-4	-1	2	2	2	2	2	-4	Medium	1	1	1	1,00	-4,00
Socio-economic: Impact on Existing Infrastructure (i.e. roads, fences, etc.)	Underground Mining (Alt 1)	Decommissioning	-1	2	2	3	2	3	-6,75	-1	2	2	2	2	2	-4	Medium	1	1	1	1,00	-4,00
Socio-economic: Inability of the community to capture economic benefits & managing expectation	Underground Mining (Alt 1)	Planning	-1	2	3	4	3	4	-12	-1	2	2	2	3	2	-4,5	Medium	1	1	1	1,00	-4,50
Socio-economic: Inability of the community to capture economic benefits & managing expectation	Underground Mining (Alt 1)	Construction	-1	2	3	4	3	4	-12	-1	2	2	2	3	2	-4,5	Medium	1	1	1	1,00	-4,50
Socio- economic: Inability of the community to capture economic benefits & managing expectation	Underground Mining (Alt 1)	Rehab and closure	-1	2	3	4	3	4	-12	-1	2	2	2	3	2	-4,5	Medium	1	1	1	1,00	-4,50

IMPACT DESCRIPTION			PRE - MITIGATION							POST - MITIGATION								IMPACT PRIORITISATION				
Impact	**Alternative**	**Project Phase**	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-Mitigation	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-Mitigation	Confidence	Public response	Cumulative Impact	Irreplaceable loss	Priority Factor	Final Significance
Socio-economic: Inability of the community to capture economic benefits & managing expectation	Underground Mining (Alt 1)	Operation	-1	2	3	4	3	4	-12	-1	2	2	2	3	2	-4,5	Medium	1	1	1	1,00	-4,50
Socio-economic: Inability of the community to capture economic benefits & managing expectation	Underground Mining (Alt 1)	Decommissioning	-1	2	3	4	3	4	-12	-1	2	2	2	3	2	-4,5	Medium	1	1	1	1,00	-4,50
Socio-economic: Employment Opportunities	Underground Mining (Alt 1)	Construction	1	2	3	3	3	4	11	1	2	3	4	3	4	12	Medium	3	1	1	1,33	16,00
Socio-economic: Employment Opportunities	Underground Mining (Alt 1)	Operation	1	2	3	3	3	4	11	1	2	3	4	3	4	12	Medium	3	1	1	1,33	16,00
Socio-economic: Employment Opportunities	Underground Mining (Alt 1)	Decommissioning	-1	2	3	4	3	4	-12	-1	2	2	2	3	2	-4,5	Medium	1	1	1	1,00	-4,50
Socio-economic: Employment Opportunities	Underground Mining (Alt 1)	Rehab and closure	-1	2	3	4	3	4	-12	-1	2	2	2	3	2	-4,5	Medium	1	1	1	1,00	-4,50
Wetland																						
Wetland: Loss / degradation of wetland habitat	Alternative Shaft (Alt 1)	Planning	-1	2	2	3	3	3	-7,5	1	1	1	1	2	2	2,5	High	1	1	2	1,17	2,92
Wetland: Loss / degradation of wetland habitat	Alternative Shaft (Alt 1)	Construction	-1	3	3	3	3	4	-12	-1	1	1	1	1	2	-2	High	1	1	2	1,17	-2,33
Wetland: Loss / degradation of wetland habitat	Alternative Shaft (Alt 1)	Operation	-1	3	3	3	3	4	-12	-1	2	3	2	2	2	-4,5	High	1	1	2	1,17	-5,25
Wetland: Loss / degradation of wetland habitat	Alternative Shaft (Alt 1)	Decommissioning	-1	2	5	2	2	3	-8,25	-1	2	3	2	2	2	-4,5	High	1	1	2	1,17	-5,25
Wetland: Loss / degradation of wetland habitat	Alternative Shaft (Alt 1)	Rehab and closure	-1	2	3	3	3	3	-8,25	1	1	1	1	2	2	2,5	High	1	1	2	1,17	2,92
Wetland: Loss / degradation of wetland habitat	Alternative Shaft (Alt 2)	Planning	-1	2	2	3	3	3	-7,5	1	1	1	1	2	2	2,5	High	1	1	2	1,17	2,92
Wetland: Loss / degradation of wetland habitat	Alternative Shaft (Alt 2)	Construction	-1	3	3	3	3	4	-12	-1	1	1	1	1	2	-2	High	1	1	2	1,17	-2,33
Wetland: Loss / degradation of wetland habitat	Alternative Shaft (Alt 2)	Operation	-1	3	3	3	3	4	-12	-1	2	3	2	2	2	-4,5	High	1	1	2	1,17	-5,25
Wetland: Loss / degradation of wetland habitat	Alternative Shaft (Alt 2)	Decommissioning	-1	2	5	2	2	3	-8,25	-1	2	3	2	2	2	-4,5	High	1	1	2	1,17	-5,25
Wetland: Loss / degradation of wetland habitat	Alternative Shaft (Alt 2)	Rehab and closure	-1	2	3	3	3	3	-8,25	1	1	1	1	2	2	2,5	High	1	1	2	1,17	2,92
Wetland: Loss / degradation of wetland habitat	Powerline (Alt 1)	Planning	-1	2	2	3	3	3	-7,5	-1	1	1	1	2	2	-2,5	High	1	1	2	1,17	-2,92
Wetland: Loss / degradation of wetland habitat	Powerline (Alt 1)	Construction	-1	3	3	3	3	4	-12	-1	1	1	1	2	2	-2,5	High	1	1	2	1,17	-2,92
Wetland: Loss / degradation of wetland habitat	Powerline (Alt 2)	Planning	-1	2	2	3	3	3	-7,5	-1	1	1	1	2	2	-2,5	High	1	1	2	1,17	-2,92
Wetland: Loss / degradation of wetland habitat	Powerline (Alt 2)	Construction	-1	3	3	3	3	4	-12	-1	1	1	1	2	2	-2,5	High	1	1	1	1,00	-2,50
Wetland: Loss / degradation of wetland habitat	Underground Mining (Alt 1)	Planning	-1	2	2	3	3	3	-7,5	1	1	1	1	2	2	2,5	High	1	1	2	1,17	2,92
Wetland: Loss / degradation of wetland habitat	Underground Mining (Alt 1)	Construction	-1	2	4	4	4	1	-3,5	-1	1	4	2	3	1	-2,5	High	1	1	2	1,17	-2,92
Wetland: Loss / degradation of wetland habitat	Underground Mining (Alt 1)	Operation	-1	2	2	3	3	3	-7,5	-1	1	4	2	3	1	-2,5	High	1	1	2	1,17	-2,92
Wetland: Loss / degradation of wetland habitat	Underground Mining (Alt 1)	Decommissioning	-1	2	2	3	3	3	-7,5	-1	1	4	2	3	1	-2,5	High	1	1	2	1,17	-2,92
Wetland: Loss / degradation of wetland habitat	Underground Mining (Alt 1)	Rehab and closure	-1	2	2	3	3	3	-7,5	1	1	1	1	2	2	2,5	High	1	1	2	1,17	2,92
Noise																						
Noise: Increase in noise levels at surrounding receptors due to construction activities in the day	Alternative Shaft (Alt 1)	Construction	-1	3	2	1	1	1	-1,75	-1	3	2	1	1	1	-1,75	High	1	2	1	1,17	-2,04
Noise: Increase in noise levels at surrounding receptors due to construction activities in the day	Alternative Shaft (Alt 2)	Construction	-1	3	2	1	1	1	-1,75	-1	3	2	1	1	1	-1,75	High	1	2	1	1,17	-2,04
Noise: Increase in noise levels at surrounding receptors due to operation of ventilation fans in the day	Alternative Shaft (Alt 1)	Operation	-1	3	4	1	1	1	-2,25	-1	3	4	1	1	1	-2,25	High	1	2	1	1,17	-2,63
Noise: Increase in noise levels at surrounding receptors due to operation of ventilation fans in the day	Alternative Shaft (Alt 2)	Operation	-1	3	4	1	1	1	-2,25	-1	3	4	1	1	1	-2,25	High	1	2	1	1,17	-2,63
Noise: Increase in noise levels at surrounding receptors due to construction activities at night	Alternative Shaft (Alt 1)	Construction	-1	3	2	3	1	2	-4,5	-1	3	2	3	1	2	-4,5	High	1	2	1	1,17	-5,25
Noise: Increase in noise levels at surrounding receptors due to construction activities at night	Alternative Shaft (Alt 2)	Construction	-1	3	2	3	1	2	-4,5	-1	3	2	3	1	2	-4,5	High	1	2	1	1,17	-5,25

IMPACT DESCRIPTION			PRE - MITIGATION							POST - MITIGATION								IMPACT PRIORITISATION				
Impact	**Alternative**	**Project Phase**	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-Mitigation	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-Mitigation	Confidence	Public response	Cumulative Impact	Irreplaceable loss	Priority Factor	Final Significance
Noise: Increase in noise levels at surrounding receptors due to operational mining activities at night	Alternative Shaft (Alt 1)	Operation	-1	3	4	1	1	1	-2,25	-1	3	4	1	1	1	-2,25	High	1	2	1	1,17	-2,63
Noise: Increase in noise levels at surrounding receptors due to operation of ventilation fans at night	Alternative Shaft (Alt 2)	Operation	-1	3	4	3	1	2	-5,5	-1	3	4	3	1	2	-5,5	High	1	2	1	1,17	-6,42
Hydrology																						
Hydrology: Erosion of soils	Alternative Shaft (Alt 1)	Construction	-1	3	4	2	2	4	-11	-1	1	1	1	2	2	-2,5	Medium	1	1	1	1,00	-2,50
Hydrology: Erosion of soils	Alternative Shaft (Alt 1)	Operation	-1	3	4	2	2	3	-8,25	-1	1	1	1	2	2	-2,5	Medium	1	1	1	1,00	-2,50
Hydrology: Erosion of soils	Alternative Shaft (Alt 1)	Decommissioning	-1	3	4	2	2	4	-11	-1	1	1	1	2	2	-2,5	Medium	1	1	1	1,00	-2,50
Hydrology: Erosion of soils	Alternative Shaft (Alt 1)	Rehab and closure	-1	3	4	2	2	3	-8,25	-1	1	1	1	2	2	-2,5	Medium	1	1	1	1,00	-2,50
Hydrology: Pollutants entering the surface water environment	Alternative Shaft (Alt 1)	Construction	-1	4	4	2	2	3	-9	-1	3	1	1	2	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Pollutants entering the surface water environment	Alternative Shaft (Alt 1)	Operation	-1	4	4	4	2	3	-10,5	-1	3	1	1	2	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Pollutants entering the surface water environment	Alternative Shaft (Alt 1)	Decommissioning	-1	4	4	2	2	3	-9	-1	3	1	1	2	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Pollutants entering the surface water environment	Alternative Shaft (Alt 1)	Rehab and closure	-1	4	4	2	2	3	-9	-1	3	1	1	2	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Increase in runoff water	Alternative Shaft (Alt 1)	Construction	-1	1	3	1	2	3	-5,25	-1	1	3	1	2	2	-3,5	High	1	1	1	1,00	-3,50
Hydrology: Increase in runoff water	Alternative Shaft (Alt 1)	Operation	-1	1	4	1	2	3	-6	-1	1	4	1	2	3	-6	High	1	1	1	1,00	-6,00
Hydrology: Increase in runoff water	Alternative Shaft (Alt 1)	Decommissioning	-1	1	3	1	2	3	-5,25	-1	1	3	1	2	2	-3,5	High	1	1	1	1,00	-3,50
Hydrology: Increase in runoff water	Alternative Shaft (Alt 1)	Rehab and closure	-1	1	2	1	2	3	-4,5	-1	1	2	1	2	2	-3	High	1	1	1	1,00	-3,00
Hydrology: Potential Flooding (River and Surface water)	Alternative Shaft (Alt 1)	Construction	-1	1	1	4	3	2	-4,5	-1	1	1	2	3	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Potential Flooding (River and Surface water)	Alternative Shaft (Alt 1)	Operation	-1	1	1	4	3	2	-4,5	-1	1	1	2	3	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Potential Flooding (River and Surface water)	Alternative Shaft (Alt 1)	Decommissioning	-1	1	1	4	3	2	-4,5	-1	1	1	2	3	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Erosion of soils	Alternative Shaft (Alt 2)	Construction	-1	3	4	2	2	4	-11	-1	1	1	1	2	2	-2,5	Medium	1	1	1	1,00	-2,50
Hydrology: Erosion of soils	Alternative Shaft (Alt 2)	Operation	-1	3	4	2	2	3	-8,25	-1	1	1	1	2	2	-2,5	Medium	1	1	1	1,00	-2,50
Hydrology: Erosion of soils	Alternative Shaft (Alt 2)	Decommissioning	-1	3	4	2	2	4	-11	-1	1	1	1	2	2	-2,5	Medium	1	1	1	1,00	-2,50
Hydrology: Erosion of soils	Alternative Shaft (Alt 2)	Rehab and closure	-1	3	4	2	2	3	-8,25	-1	1	1	1	2	2	-2,5	Medium	1	1	1	1,00	-2,50
Hydrology: Pollutants entering the surface water environment	Alternative Shaft (Alt 2)	Construction	-1	4	4	2	2	3	-9	-1	3	1	1	2	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Pollutants entering the surface water environment	Alternative Shaft (Alt 2)	Operation	-1	4	4	4	2	3	-10,5	-1	3	1	1	2	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Pollutants entering the surface water environment	Alternative Shaft (Alt 2)	Decommissioning	-1	4	4	2	2	3	-9	-1	3	1	1	2	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Pollutants entering the surface water environment	Alternative Shaft (Alt 2)	Rehab and closure	-1	4	4	2	2	3	-9	-1	3	1	1	2	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Increase in runoff water	Alternative Shaft (Alt 2)	Construction	-1	1	3	1	2	3	-5,25	-1	1	3	1	2	2	-3,5	High	1	1	1	1,00	-3,50
Hydrology: Increase in runoff water	Alternative Shaft (Alt 2)	Operation	-1	1	4	1	2	3	-6	-1	1	4	1	2	3	-6	High	1	1	1	1,00	-6,00
Hydrology: Increase in runoff water	Alternative Shaft (Alt 2)	Decommissioning	-1	1	3	1	2	3	-5,25	-1	1	3	1	2	2	-3,5	High	1	1	1	1,00	-3,50
Hydrology: Increase in runoff water	Alternative Shaft (Alt 2)	Rehab and closure	-1	1	2	1	2	3	-4,5	-1	1	2	1	2	2	-3	High	1	1	1	1,00	-3,00
Hydrology: Decrease in runoff and/or stream flow	Alternative Shaft (Alt 1)	Construction	-1	4	5	4	5	2	-9	-1	4	5	4	3	1	-4	Low	1	2	1	1,17	-4,67

IMPACT DESCRIPTION			PRE - MITIGATION							POST - MITIGATION								IMPACT PRIORITISATION				
Impact	**Alternative**	**Project Phase**	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-Mitigation	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-Mitigation	Confidence	Public response	Cumulative Impact	Irreplaceable loss	Priority Factor	Final Significance
Hydrology: Decrease in runoff and/or stream flow	Alternative Shaft (Alt 1)	Operation	-1	4	5	4	5	2	-9	-1	4	5	4	3	1	-4	Low	1	2	1	1,17	-4,67
Hydrology: Decrease in runoff and/or stream flow	Alternative Shaft (Alt 1)	Decommissioning	-1	4	5	4	5	2	-9	-1	4	5	4	3	1	-4	Low	1	2	1	1,17	-4,67
Hydrology: Decrease in runoff and/or stream flow	Alternative Shaft (Alt 1)	Rehab and closure	-1	4	5	4	5	2	-9	-1	4	5	4	3	1	-4	Low	1	2	1	1,17	-4,67
Hydrology: Decrease in runoff and/or stream flow	Alternative Shaft (Alt 2)	Construction	-1	4	5	4	5	2	-9	-1	4	5	4	3	1	-4	Low	1	2	1	1,17	-4,67
Hydrology: Decrease in runoff and/or stream flow	Alternative Shaft (Alt 2)	Operation	-1	4	5	4	5	2	-9	-1	4	5	4	3	1	-4	Low	1	2	1	1,17	-4,67
Hydrology: Decrease in runoff and/or stream flow	Alternative Shaft (Alt 2)	Decommissioning	-1	4	5	4	5	2	-9	-1	4	5	4	3	1	-4	Low	1	2	1	1,17	-4,67
Hydrology: Decrease in runoff and/or stream flow	Alternative Shaft (Alt 2)	Rehab and closure	-1	4	5	4	5	2	-9	-1	4	5	4	3	1	-4	Low	1	2	1	1,17	-4,67
Hydrology: Potential Flooding (River and Surface water)	Alternative Shaft (Alt 2)	Construction	-1	1	1	4	3	2	-4,5	-1	1	1	2	3	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Potential Flooding (River and Surface water)	Alternative Shaft (Alt 2)	Operation	-1	1	1	4	3	2	-4,5	-1	1	1	2	3	1	-1,75	Medium	1	1	1	1,00	-1,75
Hydrology: Potential Flooding (River and Surface water)	Alternative Shaft (Alt 2)	Decommissioning	-1	1	1	4	3	2	-4,5	-1	1	1	2	3	1	-1,75	Medium	1	1	1	1,00	-1,75
Ecology																						
Ecology: Temporary disturbance of wildlife due to increased human presence and possible use of machinery and/or vehicles	Underground Mining (Alt 1)	Planning	-1	3	4	3	3	3	-9,75	-1	3	3	2	3	2	-5,5	Medium	1	1	1	1,00	-5,50
Ecology: Temporary disturbance of wildlife due to increased human presence and possible use of machinery and/or vehicles	Powerline (Alt 1)	Planning	-1	3	4	3	3	3	-9,75	-1	3	3	2	3	2	-5,5	Medium	1	1	1	1,00	-5,50
Ecology: Temporary disturbance of wildlife due to increased human presence and possible use of machinery and/or vehicles	Powerline (Alt 2)	Planning	-1	3	4	3	3	3	-9,75	-1	3	3	2	3	2	-5,5	Medium	1	1	1	1,00	-5,50
Ecology: Temporary disturbance of wildlife due to increased human presence and possible use of machinery and/or vehicles	Alternative Shaft (Alt 1)	Planning	-1	3	4	3	3	3	-9,75	-1	3	3	2	3	2	-5,5	Medium	1	1	1	1,00	-5,50
Ecology: Temporary disturbance of wildlife due to increased human presence and possible use of machinery and/or vehicles	Alternative Shaft (Alt 2)	Planning	-1	3	4	3	3	3	-9,75	-1	3	3	2	3	2	-5,5	Medium	1	1	1	1,00	-5,50
Ecology: Loss and fragmentation of the vegetation community as well the destruction of a portion of an Endangered vegetation type (NBA, 2012).	Alternative Shaft (Alt 2)	Construction	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	High	1	1	1	1,00	-9,00
Ecology: Loss of important Irreplaceable Critical Biodiversity Areas, Ecological Support Areas and Other Natural Areas (MTPA, 2014).	Alternative Shaft (Alt 2)	Construction	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	High	1	1	1	1,00	-9,00
Ecology: Displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Alternative Shaft (Alt 2)	Construction	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	High	1	1	1	1,00	-9,00
Ecology: Loss and fragmentation of the vegetation community as well the destruction of a portion of an Endangered vegetation type (NBA, 2012).	Alternative Shaft (Alt 1)	Construction	-1	3	5	4	4	3	-12	-1	2	3	2	3	4	-10	High	1	1	1	1,00	-10,00
Ecology: Displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Alternative Shaft (Alt 1)	Construction	-1	3	5	4	4	3	-12	-1	2	3	2	3	4	-10	High	1	1	1	1,00	-10,00

IMPACT DESCRIPTION			PRE - MITIGATION							POST - MITIGATION								IMPACT PRIORITISATION				
Impact	**Alternative**	**Project Phase**	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-Mitigation	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-Mitigation	Confidence	Public response	Cumulative Impact	Irreplaceable loss	Priority Factor	Final Significance
Ecology: Loss of important Irreplaceable Critical Biodiversity Areas, Ecological Support Areas and Other Natural Areas (MTPA, 2014).	Alternative Shaft (Alt 1)	Construction	-1	3	5	4	4	3	-12	-1	2	3	2	3	4	-10	High	1	1	1	1,00	-10,00
Ecology: Loss and fragmentation of the vegetation community as well the destruction of a portion of an Endangered vegetation type (NBA, 2012).	Powerline (Alt 1)	Construction	-1	3	5	4	3	3	-11,25	-1	2	3	2	3	4	-10	High	1	1	1	1,00	-10,00
Ecology: Loss of important Irreplaceable Critical Biodiversity Areas, Ecological Support Areas and Other Natural Areas (MTPA, 2014).	Powerline (Alt 1)	Construction	-1	3	5	4	3	3	-11,25	-1	2	3	2	3	4	-10	High	1	1	1	1,00	-10,00
Ecology: Displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Powerline (Alt 1)	Construction	-1	3	5	4	3	3	-11,25	-1	2	3	2	3	4	-10	High	1	1	1	1,00	-10,00
Ecology: Loss and fragmentation of the vegetation community as well the destruction of a portion of an Endangered vegetation type (NBA, 2012).	Powerline (Alt 2)	Construction	-1	2	5	3	2	3	-9	-1	1	2	2	2	4	-7	Medium	1	1	1	1,00	-7,00
Ecology: Loss of important Irreplaceable Critical Biodiversity Areas, Ecological Support Areas and Other Natural Areas (MTPA, 2014).	Powerline (Alt 2)	Construction	-1	2	5	3	2	3	-9	-1	1	2	2	2	4	-7	Medium	1	1	1	1,00	-7,00
Ecology: Displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Powerline (Alt 2)	Construction	-1	2	5	3	2	3	-9	-1	1	2	2	2	4	-7	Medium	1	1	1	1,00	-7,00
Ecology: Further loss and fragmentation of the vegetation community and spread and/or establishment of alien and/or invasive species.	Alternative Shaft (Alt 2)	Operation	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	Medium	1	1	1	1,00	-9,00
Ecology: Displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Alternative Shaft (Alt 2)	Operation	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	Medium	1	1	1	1,00	-9,00
Ecology: Infringement by humans into the few remaining natural grassland and wetlands areas, with associated impacts such as poaching, litter and introduction of diseases.	Alternative Shaft (Alt 2)	Operation	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	Medium	1	1	1	1,00	-9,00
Ecology: Further loss and fragmentation of the vegetation community and spread and/or establishment of alien and/or invasive species.	Alternative Shaft (Alt 1)	Operation	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	Medium	1	1	1	1,00	-9,00
Ecology: Displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Alternative Shaft (Alt 1)	Operation	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	Medium	1	1	1	1,00	-9,00
Ecology: Infringement by humans into the few remaining natural grassland and wetlands areas, with associated impacts such as poaching, litter and introduction of diseases.	Alternative Shaft (Alt 1)	Operation	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	Medium	1	1	1	1,00	-9,00
Ecology: Displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Powerline (Alt 1)	Operation	-1	3	5	4	4	4	-16	-1	2	2	2	2	4	-8	Medium	1	1	1	1,00	-8,00
Ecology:Spread and/or establishment of alien and/or invasive species	Powerline (Alt 1)	Operation	-1	3	5	4	4	4	-16	-1	2	2	2	2	4	-8	Medium	1	1	1	1,00	-8,00

IMPACT DESCRIPTION			PRE - MITIGATION							POST - MITIGATION								IMPACT PRIORITISATION				
Impact	**Alternative**	**Project Phase**	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-Mitigation	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-Mitigation	Confidence	Public response	Cumulative Impact	Irreplaceable loss	Priority Factor	Final Significance
Ecology: Displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Powerline (Alt 2)	Operation	-1	3	5	4	4	4	-16	-1	2	2	2	2	4	-8	Medium	1	1	1	1,00	-8,00
Ecology:Spread and/or establishment of alien and/or invasive species	Powerline (Alt 2)	Operation	-1	3	5	4	4	4	-16	-1	2	2	2	2	4	-8	Medium	1	1	1	1,00	-8,00
Ecology: Further loss and fragmentation of the vegetation community and spread and/or establishment of alien and/or invasive species.	Underground Mining (Alt 1)	Operation	-1	4	5	3	4	4	-16	-1	3	3	2	4	3	-9	Medium	1	1	1	1,00	-9,00
Ecology: Sudden sinking or gradual downward settling of the ground's surface over the areas where the underground mining is to take place.	Underground Mining (Alt 1)	Operation	-1	4	5	3	4	4	-16	-1	3	3	2	4	3	-9	Medium	1	1	1	1,00	-9,00
Ecology: Displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Underground Mining (Alt 1)	Operation	-1	4	5	3	4	4	-16	-1	3	3	2	4	3	-9	Medium	1	1	1	1,00	-9,00
Ecology: Infringement by humans into the few remaining natural grassland and wetlands areas, with associated impacts such as poaching, litter and introduction of diseases.	Underground Mining (Alt 1)	Operation	-1	4	5	3	4	4	-16	-1	3	3	2	4	3	-9	Medium	1	1	1	1,00	-9,00
Ecology: Further impacts due to the spread and/or establishment of alien and/or invasive species.	Alternative Shaft (Alt 2)	Decommissioning	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	Medium	1	1	1	1,00	-9,00
Ecology: Continued displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Alternative Shaft (Alt 2)	Decommissioning	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	Medium	1	1	1	1,00	-9,00
Ecology: Further impacts due to the spread and/or establishment of alien and/or invasive species.	Alternative Shaft (Alt 1)	Decommissioning	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	Medium	1	1	1	1,00	-9,00
Ecology: Continued displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Alternative Shaft (Alt 1)	Decommissioning	-1	2	5	4	2	3	-9,75	-1	2	3	2	2	4	-9	Medium	1	1	1	1,00	-9,00
Ecology: Further impacts due to the spread and/or establishment of alien and/or invasive species.	Powerline (Alt 1)	Decommissioning	-1	3	4	3	3	4	-13	-1	2	3	2	2	2	-4,5	Medium	1	1	1	1,00	-4,50
Ecology: Continued displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Powerline (Alt 1)	Decommissioning	-1	3	4	3	3	4	-13	-1	2	3	2	2	2	-4,5	Medium	1	1	1	1,00	-4,50
Ecology: Further impacts due to the spread and/or establishment of alien and/or invasive species.	Powerline (Alt 2)	Decommissioning	-1	3	4	3	3	3	-9,75	-1	2	2	2	2	2	-4	Medium	1	1	1	1,00	-4,00
Ecology: Continued displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Powerline (Alt 2)	Decommissioning	-1	3	4	3	3	3	-9,75	-1	2	2	2	2	2	-4	Medium	1	1	1	1,00	-4,00
Ecology: Further impacts due to the spread and/or establishment of alien and/or invasive species.	Underground Mining (Alt 1)	Decommissioning	-1	4	4	3	4	4	-15	-1	3	4	3	4	3	-10,5	Medium	1	1	1	1,00	-10,50
Ecology: Continued displacement, direct mortalities and disturbance of faunal community (including multiple threatened species) due to habitat loss and disturbances (such as dust and noise).	Underground Mining (Alt 1)	Decommissioning	-1	4	5	3	4	4	-16	-1	3	4	3	4	3	-10,5	Medium	1	1	1	1,00	-10,50
Ecology: Spread and/or establishment of alien invasive plant species.	Alternative Shaft (Alt 2)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75

IMPACT DESCRIPTION			PRE - MITIGATION							POST - MITIGATION								IMPACT PRIORITISATION				
Impact	Alternative	Project Phase	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-Mitigation	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-Mitigation	Confidence	Public response	Cumulative Impact	Irreplaceable loss	Priority Factor	Final Significance
Ecology: Soil erosion.	Alternative Shaft (Alt 2)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75
Ecology: Possible re-establishment of indigenous vegetation.	Alternative Shaft (Alt 2)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75
Ecology: Spread and/or establishment of alien invasive plant species.	Alternative Shaft (Alt 1)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75
Ecology: Soil erosion.	Alternative Shaft (Alt 1)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75
Ecology: Possible re-establishment of indigenous vegetation.	Alternative Shaft (Alt 1)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75
Ecology: Spread and/or establishment of alien invasive plant species.	Powerline (Alt 1)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75
Ecology: Soil erosion.	Powerline (Alt 1)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75
Ecology: Possible re-establishment of indigenous vegetation.	Powerline (Alt 1)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75
Ecology: Spread and/or establishment of alien invasive plant species.	Powerline (Alt 2)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75
Ecology: Soil erosion.	Powerline (Alt 2)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75
Ecology: Possible re-establishment of indigenous vegetation.	Powerline (Alt 2)	Rehab and closure	-1	2	5	4	2	3	-9,75	1	2	3	2	2	3	6,75	High	1	1	1	1,00	6,75
Ecology: Spread and/or establishment of alien invasive plant species.	Underground Mining (Alt 1)	Rehab and closure	-1	4	5	3	4	4	-16	-1	3	3	2	4	3	-9	Medium	1	1	1	1,00	-9,00
Ecology: Soil erosion	Underground Mining (Alt 1)	Rehab and closure	-1	4	5	3	4	4	-16	-1	3	3	2	4	3	-9	Medium	1	1	1	1,00	-9,00
Ecology: Possible re-establishment of indigenous vegetation.	Underground Mining (Alt 1)	Rehab and closure	-1	4	5	3	4	4	-16	-1	3	3	2	4	3	-9	Medium	1	1	1	1,00	-9,00
Ecology: Subsidence and alteration of surface geology, hydrology will impact on habitats	Underground Mining (Alt 1)	Rehab and closure	-1	4	5	3	4	4	-16	-1	3	3	2	4	3	-9	Medium	1	1	1	1,00	-9,00
Aquatic Ecology																						
Aquatic: Loss / degradation of aquatic habitat and biota	Alternative Shaft (Alt 1)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Loss / degradation of aquatic habitat and biota	Alternative Shaft (Alt 1)	Construction	-1	3	2	2	2	3	-6,75	-1	2	2	2	2	1	-2	High	1	1	1	1,00	-2,00
Aquatic: Loss / degradation of aquatic habitat and biota	Alternative Shaft (Alt 1)	Operation	-1	3	2	2	2	2	-4,5	-1	2	1	2	2	1	-1,75	High	1	1	1	1,00	-1,75
Aquatic: Loss / degradation of aquatic habitat and biota	Alternative Shaft (Alt 1)	Decommissioning	-1	3	1	2	2	2	-4	-1	2	1	1	2	1	-1,5	Medium	1	1	1	1,00	-1,50
Aquatic: Loss / degradation of aquatic habitat and biota	Alternative Shaft (Alt 1)	Rehab and closure	-1	3	1	2	2	2	-4	-1	2	1	1	1	1	-1,25	High	1	1	1	1,00	-1,25
Aquatic: Loss / degradation of aquatic habitat and biota	Alternative Shaft (Alt 2)	Planning	-1	1	1	1	1	1	-1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Loss / degradation of aquatic habitat and biota	Alternative Shaft (Alt 2)	Construction	-1	3	2	2	2	3	-6,75	-1	2	2	2	2	1	-2	High	1	1	1	1,00	-2,00
Aquatic: Loss / degradation of aquatic habitat and biota	Alternative Shaft (Alt 2)	Operation	-1	3	2	2	2	2	-4,5	-1	2	1	2	2	1	-1,75	High	1	1	1	1,00	-1,75
Aquatic: Loss / degradation of aquatic habitat and biota	Alternative Shaft (Alt 2)	Decommissioning	-1	3	1	2	2	2	-4	-1	2	1	1	2	1	-1,5	Medium	1	1	1	1,00	-1,50
Aquatic: Loss / degradation of aquatic habitat and biota	Alternative Shaft (Alt 2)	Rehab and closure	-1	3	1	2	2	2	-4	-1	2	1	1	1	1	-1,25	High	1	1	1	1,00	-1,25
Aquatic: Impaired water quality in watercourses	Alternative Shaft (Alt 1)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Impaired water quality in watercourses	Alternative Shaft (Alt 2)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Impaired water quality in watercourses	Alternative Shaft (Alt 2)	Construction	-1	3	2	2	2	3	-6,75	-1	2	1	2	2	2	-3,5	High	1	1	1	1,00	-3,50
Aquatic: Impaired water quality in watercourses	Alternative Shaft (Alt 1)	Operation	-1	3	1	1	2	2	-3,5	-1	2	1	1	2	1	-1,5	High	1	1	1	1,00	-1,50
Aquatic: Impaired water quality in watercourses	Alternative Shaft (Alt 2)	Operation	-1	3	1	1	2	2	-3,5	-1	2	1	1	2	1	-1,5	High	1	1	1	1,00	-1,50
Aquatic: Impaired water quality in watercourses	Alternative Shaft (Alt 1)	Decommissioning	-1	3	1	1	2	3	-5,25	-1	2	1	1	2	2	-3	High	1	1	1	1,00	-3,00
Aquatic: Impaired water quality in watercourses	Alternative Shaft (Alt 2)	Decommissioning	-1	3	1	1	2	3	-5,25	-1	2	1	1	2	2	-3	High	1	1	1	1,00	-3,00

IMPACT DESCRIPTION			PRE - MITIGATION							POST - MITIGATION								IMPACT PRIORITISATION				
Impact	Alternative	Project Phase	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-Mitigation	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-Mitigation	Confidence	Public response	Cumulative Impact	Irreplaceable loss	Priority Factor	Final Significance
Aquatic: Impaired water quality in watercourses	Alternative Shaft (Alt 1)	Rehab and closure	-1	3	2	2	2	3	-6,75	-1	2	1	2	1	1	-1,5	Medium	1	1	1	1,00	-1,50
Aquatic: Impaired water quality in watercourses	Alternative Shaft (Alt 2)	Rehab and closure	-1	3	2	2	2	3	-6,75	-1	2	1	2	1	1	-1,5	Medium	1	1	1	1,00	-1,50
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Alternative Shaft (Alt 1)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Alternative Shaft (Alt 1)	Construction	-1	3	2	2	2	3	-6,75	-1	2	1	2	2	2	-3,5	High	1	1	1	1,00	-3,50
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Alternative Shaft (Alt 1)	Operation	-1	3	2	2	2	2	-4,5	-1	2	2	2	2	1	-2	High	1	1	1	1,00	-2,00
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Alternative Shaft (Alt 1)	Decommissioning	-1	3	1	2	2	2	-4	-1	2	1	1	2	2	-3	High	1	1	1	1,00	-3,00
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Alternative Shaft (Alt 1)	Rehab and closure	-1	3	1	2	2	2	-4	-1	2	1	1	1	2	-2,5	Medium	1	1	1	1,00	-2,50
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Alternative Shaft (Alt 2)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Alternative Shaft (Alt 2)	Construction	-1	3	2	2	2	3	-6,75	-1	2	1	2	2	2	-3,5	High	1	1	1	1,00	-3,50
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Alternative Shaft (Alt 2)	Operation	-1	3	2	2	2	2	-4,5	-1	2	2	2	2	1	-2	High	1	1	1	1,00	-2,00
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Alternative Shaft (Alt 2)	Decommissioning	-1	3	1	2	2	2	-4	-1	2	1	1	2	2	-3	High	1	1	1	1,00	-3,00
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Alternative Shaft (Alt 2)	Rehab and closure	-1	3	1	2	2	2	-4	-1	2	1	1	1	2	-2,5	Medium	1	1	1	1,00	-2,50
Aquatic: Loss / degradation of aquatic habitat and biota	Powerline (Alt 1)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Loss / degradation of aquatic habitat and biota	Powerline (Alt 2)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Impaired water quality in watercourses	Alternative Shaft (Alt 1)	Construction	-1	3	2	2	2	3	-6,75	-1	2	1	2	2	2	-3,5	High	1	1	1	1,00	-3,50
Aquatic: Impaired water quality in watercourses	Alternative Shaft (Alt 2)	Construction	-1	3	2	2	2	3	-6,75	-1	2	1	2	2	2	-3,5	High	1	1	1	1,00	-3,50
Aquatic: Loss / degradation of aquatic habitat and biota	Powerline (Alt 1)	Construction	-1	2	2	2	2	5	-10	-1	1	2	2	2	3	-5,25	High	1	2	1	1,17	-6,13
Aquatic: Loss / degradation of aquatic habitat and biota	Powerline (Alt 2)	Construction	-1	2	2	2	2	5	-10	-1	1	2	2	2	3	-5,25	High	1	2	1	1,17	-6,13
Aquatic: Loss / degradation of aquatic habitat and biota	Powerline (Alt 1)	Operation	-1	1	1	1	1	2	-2	-1	1	1	1	1	2	-2	Medium	1	1	1	1,00	-2,00
Aquatic: Loss / degradation of aquatic habitat and biota	Powerline (Alt 2)	Operation	-1	1	1	1	1	2	-2	-1	1	1	1	1	2	-2	Medium	1	1	1	1,00	-2,00
Aquatic: Loss / degradation of aquatic habitat and biota	Powerline (Alt 1)	Decommissioning	-1	2	2	2	2	4	-8	-1	1	2	2	2	2	-3,5	High	1	1	1	1,00	-3,50
Aquatic: Loss / degradation of aquatic habitat and biota	Powerline (Alt 2)	Decommissioning	-1	2	2	2	2	4	-8	-1	1	2	2	2	2	-3,5	High	1	1	1	1,00	-3,50
Aquatic: Loss / degradation of aquatic habitat and biota	Powerline (Alt 1)	Rehab and closure	-1	2	2	2	2	2	-4	-1	1	1	1	1	1	-1	Medium	1	2	1	1,17	-1,17
Aquatic: Loss / degradation of aquatic habitat and biota	Powerline (Alt 2)	Rehab and closure	-1	2	2	2	2	2	-4	-1	1	1	1	1	1	-1	Medium	1	2	1	1,17	-1,17
Aquatic: Impaired water quality in watercourses	Powerline (Alt 1)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Impaired water quality in watercourses	Powerline (Alt 1)	Construction	-1	3	2	3	2	5	-12,5	-1	2	2	2	2	3	-6	High	1	2	1	1,17	-7,00
Aquatic: Impaired water quality in watercourses	Powerline (Alt 1)	Operation	-1	1	1	1	1	2	-2	-1	1	1	1	1	1	-1	High	1	1	1	1,00	-1,00
Aquatic: Impaired water quality in watercourses	Powerline (Alt 1)	Decommissioning	-1	3	2	3	2	4	-10	-1	2	2	2	2	2	-4	High	1	2	1	1,17	-4,67
Aquatic: Impaired water quality in watercourses	Powerline (Alt 1)	Rehab and closure	-1	3	2	2	2	2	-4,5	-1	2	1	1	1	1	-1,25	High	1	2	1	1,17	-1,46
Aquatic: Impaired water quality in watercourses	Powerline (Alt 2)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Impaired water quality in watercourses	Powerline (Alt 2)	Construction	-1	3	2	3	2	5	-12,5	-1	2	2	2	2	3	-6	High	1	2	1	1,17	-7,00
Aquatic: Impaired water quality in watercourses	Powerline (Alt 2)	Operation	-1	1	1	1	1	2	-2	-1	1	1	1	1	1	-1	High	1	1	1	1,00	-1,00
Aquatic: Impaired water quality in watercourses	Powerline (Alt 2)	Decommissioning	-1	3	2	3	2	4	-10	-1	2	2	2	2	2	-4	High	1	2	1	1,17	-4,67

IMPACT DESCRIPTION			PRE - MITIGATION							POST - MITIGATION								IMPACT PRIORITISATION				
Impact	Alternative	Project Phase	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-Mitigation	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-Mitigation	Confidence	Public response	Cumulative Impact	Irreplaceable loss	Priority Factor	Final Significance
Aquatic: Impaired water quality in watercourses	Powerline (Alt 2)	Rehab and closure	-1	3	2	2	2	2	-4,5	-1	2	1	1	1	1	-1,25	High	1	2	1	1,17	-1,46
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Powerline (Alt 1)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Powerline (Alt 1)	Construction	-1	2	3	3	2	4	-10	-1	1	2	2	2	2	-3,5	High	1	2	1	1,17	-4,08
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Powerline (Alt 1)	Operation	-1	1	3	1	1	1	-1,5	-1	1	2	1	1	1	-1,25	Medium	1	2	1	1,17	-1,46
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Powerline (Alt 1)	Decommissioning	-1	2	3	2	2	4	-9	-1	1	2	1	2	2	-3	High	1	2	1	1,17	-3,50
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Powerline (Alt 1)	Rehab and closure	-1	2	3	2	2	2	-4,5	-1	1	1	1	1	1	-1	Medium	1	2	1	1,17	-1,17
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Powerline (Alt 2)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	1	1	1	1,00	1,00
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Powerline (Alt 2)	Construction	-1	2	3	3	2	4	-10	-1	1	2	2	2	2	-3,5	High	1	2	1	1,17	-4,08
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Powerline (Alt 2)	Operation	-1	1	3	1	1	1	-1,5	-1	1	2	1	1	1	-1,25	Medium	1	2	1	1,17	-1,46
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Powerline (Alt 2)	Decommissioning	-1	2	3	2	2	4	-9	-1	1	2	1	2	2	-3	High	1	2	1	1,17	-3,50
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Powerline (Alt 2)	Rehab and closure	-1	2	3	2	2	2	-4,5	-1	1	1	1	1	1	-1	Medium	1	2	1	1,17	-1,17
Aquatic: Loss / degradation of aquatic habitat and biota	Underground Mining (Alt 1)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	2	1	1	1,17	1,17
Aquatic: Loss / degradation of aquatic habitat and biota	Underground Mining (Alt 1)	Operation	-1	3	5	3	2	3	-9,75	-1	2	4	3	2	2	-5,5	High	2	3	1	1,50	-8,25
Aquatic: Loss / degradation of aquatic habitat and biota	Underground Mining (Alt 1)	Decommissioning	-1	3	5	3	2	3	-9,75	-1	2	4	3	2	2	-5,5	High	2	3	1	1,50	-8,25
Aquatic: Loss / degradation of aquatic habitat and biota	Underground Mining (Alt 1)	Rehab and closure	-1	3	4	3	2	4	-12	-1	2	4	3	2	3	-8,25	High	2	3	1	1,50	-12,38
Aquatic: Impaired water quality in watercourses	Underground Mining (Alt 1)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	2	1	1	1,17	1,17
Aquatic: Impaired water quality in watercourses	Underground Mining (Alt 1)	Operation	-1	4	5	4	2	3	-11,25	-1	3	4	3	2	3	-9	High	2	3	1	1,50	-13,50
Aquatic: Impaired water quality in watercourses	Underground Mining (Alt 1)	Decommissioning	-1	4	5	4	4	3	-12,75	-1	4	4	3	3	3	-10,5	High	2	3	1	1,50	-15,75
Aquatic: Impaired water quality in watercourses	Underground Mining (Alt 1)	Rehab and closure	-1	4	5	4	4	4	-17	-1	3	4	3	3	3	-9,75	High	2	3	1	1,50	-14,63
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Underground Mining (Alt 1)	Planning	1	1	1	1	1	1	1	1	1	1	1	1	1	1	High	2	1	1	1,17	1,17
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Underground Mining (Alt 1)	Operation	-1	4	5	3	3	4	-15	-1	3	4	3	2	3	-9	High	2	3	1	1,50	-13,50
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Underground Mining (Alt 1)	Decommissioning	-1	4	5	3	3	4	-15	-1	4	4	3	2	3	-9,75	High	2	3	1	1,50	-14,63
Aquatic: Alterations in hydrological regime (flow of surface and sub-surface water) and surface topography	Underground Mining (Alt 1)	Rehab and closure	-1	4	5	3	3	4	-15	-1	4	4	3	3	4	-14	High	2	3	1	1,50	-21,00