

CALCULATION OF THE QUANTAM

Copper Sunset Closure Costs Assessment		Location: Vereeniging				
Digby Wells and Associates (Pty) Ltd		Date: 13-Sep-10				
Description: Class A (High Risk)	Unit:	A Quantity	B Master rate	C Multiplication factor	D Weighting factor 1	E=A*B*C*D Amount (Rands)
		Step 4.5	Step 4.3	Step 4.3	Step 4.4	
Dismantling of processing plant & related structures (incl. overland conveyors & Power lines)	m ³	141.00	6.82	1.00	1.00	R 962
Demolition of steel buildings & Structures	m ²	82.00	95.00	1.00	1.00	R 7,790
Demolition of reinforced concrete buildings & structures	m ²		140.00	1.00	1.00	R 0
Rehabilitation of access roads	m ²		17.00	1.00	1.00	R 0
Demolition & rehabilitation of electrified railway lines	m		165.00	1.00	1.00	R 0
Demolition & rehabilitation of non electrified railway lines	m		90.00	1.00	1.00	R 0
Demolition of housing &/or administration facilities	m ²	9.00	190.00	1.00	1.00	R 1,710
Opencast rehabilitation including final voids & ramps	ha		99700.00	0.52	1.00	R 0
Sealing of shafts, adits & inclines	m ³		51.00	1.00	1.00	R 0
Rehabilitation of overburden & spoils	ha		66400.00	1.00	1.00	R 0
Rehabilitation of processing waste deposits & evaporation ponds (basic, salt producing waste)	ha	0.90	82700.00	1.00	1.00	R 74,430
Rehabilitation of processing waste deposits & evaporation ponds (acidic, metal-rich waste)	ha		240200.00	0.80	1.00	R 0
Rehabilitation of subsidised areas	ha		55600.00	1.00	1.00	R 0
General surface rehabilitation	ha	0.08	52600.00	1.00	1.00	R 4,208
River diversions	ha		52600.00	1.00	1.00	R 0
Fencing	m		60.00	1.00	1.00	R 0
Water management	ha		20000.00	0.67	1.00	R 0
2 to 3 years of maintenance & aftercare	ha	1.00	7000.00	1.00	1.00	R 7,022
Specialist study	SUM		0.00	0.00	1.00	R 0
Specialist study	SUM		0.00	0.00	1.00	R 0
Sub Total 1						
(Sum of items 1 to 15 Above)						R 96,122
				Weighting factor 2 (step 4.4)		
Preliminary and General		12.5% of Subtotal 1	Change according to urban, peri-urban and remote		1.05	R 12,616
Administration & supervision costs			6.0% of Subtotal 1			R 5,767
Engineering drawings & specifications			2.0% of Subtotal 1			R 1,922
Engineering & procurement of specialist work			2.5% of Subtotal 1			R 2,403
Developmetn of a closure plan						
Final groundwater modelling			2.5% of Subtotal 1			R 2,403
Sub Total 3						
(Subtotal 1 plus sum of management & administrative items, 1 to 6 above)						R 121,234
Contingency					VAT (14%)	R 16,973
(Subtotal 3 plus VAT)						R 138,207
*Total with Inflation						R 185,560.98

*Inflation (CPIX) calculated over last four years at 4.6%, 7.2%, 11.8% and 7.1%

2006	R 144,564.15
2007	R 154,972.77
2008	R 173,259.55
2009	R 185,560.98

GRAND TOTAL INCL. CPIX R 185,560.98