

Basis for Ratio of Indirect to Direct Costs

Indirect Cost Category	SMCRA	Fort Knox (2013)	Greens Creek (2013)	Kensington (2013)	Nixon Fork (2012)	Pogo (2012)	Red Dog (2009)	Rock Creek (2012)	State Draft Guidance (incl BLM/USFS)	DEC Suggestions		
										New Facilities (operating <10 yrs)	Intermediate Facilities (operating <15 yrs)	Mature Facilities (operating 15 or more yrs)
Contractor Profit	15 - 30	15	5% x O&M	10	10	7.5	10% x labor/equip costs	15	10 - 20	12.5	12.5	12.5
Contractor Overhead				5	4	7.5	10% x labor	5 - 10	6.25	6.25	6.25	
Performance Bond		3	2% x O&M	0	1.5	3	1.5	1.5	1.5	1.5	1.5	1.5
Payment Bond		0	0	0	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5
Liability Insurance		1.5% x labor	4.6% x labor	0	1.5	1.5% x direct	1.6% x labor/equip costs	1.6% x equip. cost	1.5% x labor cost	0.5	0.5	0.5
Contract Administration	2 - 7	8	2	7	9.4 (BLM) 1.5 (state)	4	1	1	2 - 7	5	5	5
Engineering Redesign	2.5 - 6	4	2	5	6	3	3	3	3 - 6	5.75	3.75	2.75
Scope Contingency	3 - 5	10	4	12	6	7.5	10	12 (10% x direct + indirect) 0	10 - 20 6 - 10 4 - 7	8.5	7	5
Bid Contingency			4	5	6	7.5	10		10 - 20			
Other	10% (Mob/Demob)			\$695K long term dam inspection & maintenance		5% (Mob/Demob)	12% x materials (freight transport)					
Other (road maintenance)							\$300,000/yr					
Inflation				3.5 over 5 more yrs (\$4.43 M)	2.67	2.66						
Direct Costs (\$M)		68.559	61.846	16.0	4.003	29.008		9.952				
Indirect Cost (\$M)		27.609	12.189	7.6	1.873	14.271		3.454				
Direct + Indirect (\$M)		96.168	74.035	23.6	5.876	43.280		13.405				
Indirect/Direct	0.325 - 0.58	0.40 (3 <sup>rd</sup> permit)	0.20 (2 <sup>nd</sup> permit)	0.475 (1 <sup>st</sup> or 2 <sup>nd</sup> permit)	0.47 (2 <sup>nd</sup> permit)	0.49 (2 <sup>nd</sup> permit)	(1 <sup>st</sup> permit)	0.35 (2 <sup>nd</sup> permit)		0.5	0.45	0.4

FORT KNOX MINE – DRAFT PERMIT

<b>DIRECT COSTS</b>		
Waste Rock Dumps		\$6,526,000
Heap Leach		\$2,509,000
Building Demo		\$861,000
Roads & Laydown Yards		\$633,000
North Wetlands Complex and Spillway		\$2,773,000
Growth Media Stockpiles		\$51,000
Pit Safety Berm		\$123,000
Water Management		\$42,418,000
TSF Earthwork		\$4,137,000
Closure Studies and Reports		\$1,177,000
Pipeline & Powerline Removal		\$1,424,000
Fence Removal		\$12,000
Well Closure		\$526,000
Post Closure Monitoring		\$616,000
Road Maintenance		\$539,000
Pit Water Treatment		\$2,060,000
Tailings Storage Facility Maintenance		\$1,053,000
Water Supply Reservoir Maintenance		\$519,000
Pit Rim Warning Signs and Maintenance		\$241,000
Dam Security Gate Installation		\$11,000
Mobilization & Demobilization		\$350,000
<b>DIRECT COSTS SUBTOTAL</b>		<b>\$68,559,000</b>
<b>INDIRECT COSTS (% x direct costs subtotal)</b>		
Engineering & Redesign	4%	\$2,742,000
Contractor Profit & Overhead	15%	\$10,284,000
Performance Bond	3%	\$2,057,000
Contract Administration	8%	\$5,485,000
Contingencies	10%	\$6,856,000
Insurance Premiums (labor = \$12,193,000)	labor x 1.5%	\$185,000
<b>INDIRECT COSTS SUBTOTAL</b>		<b>\$27,609,000</b>
<b><u>TOTAL FINANCIAL RESPONSIBILITY</u></b>		<b><u>\$96,168,000</u></b>

NIXON FORK MINE

CLOSURE & MAINTENANCE ITEM		FINANCIAL RESPONSIBILITY		
<b>Direct Costs</b>				
Equipment Capital Costs		\$947,234		
Equipment Operation & Maintenance Costs		\$310,491		
Revegetation		\$109,949		
Manpower		\$1,137,390		
Manpower Support		\$324,974		
Materials, Supplies, Other		\$379,458		
Post-Closure Monitoring		\$242,507		
One Year Holding Period			\$551,379	
<b>Direct Costs Subtotal*</b>		\$3,452,000	\$551,000	<b>\$4,003,000</b>
<b>Indirect Costs</b>				
	Percent	No Holding Period	One Year Holding Period	
Contractor Profit	10%	\$345,000	\$55,000	
Contractor Overhead	4%	\$138,000	\$22,000	
indirect + direct subtotals <sup>1</sup>		\$3,935,000	\$628,000	
Performance and Payment Bond	3%	\$118,000	\$19,000	
Liability Insurance	1.5%	\$17,000	\$3,000	
indirect + direct subtotals		\$4,070,000	\$650,000	
BLM Contract Administration	9.4%	\$324,000	\$52,000	
Engineering Redesign Plan	6%	\$207,000	\$33,000	
Contingency	12%	\$414,000	\$66,000	
State Agency Oversight	1.5%	\$52,000	\$8,000	
indirect + direct subtotals		\$5,067,000	\$809,000	
<b>Indirect Costs Subtotal</b>		\$1,615,000	\$258,000	<b>\$1,873,000</b>
<b>Direct + Indirect Total</b>				\$5,876,000
Inflation (one year at 2.67%)				\$157,000
<b>TOTAL</b>				<b>\$6,033,000<sup>2</sup></b>
<sup>1</sup> All subtotals and totals rounded to the nearest \$1,000				
<sup>2</sup> The financial responsibility will be reevaluated and adjusted as allowed in section 1.10.2.				

POGO MINE

CLOSURE MAINTENANCE ITEM	FINANCIAL RESPONSIBILITY
<b>Direct Costs</b>	
1 Year Holding Cost	\$1,952,300
Phase II: Reclamation Concurrent with Mining	\$797,400
Phase III: Reclamation and Closure of Mine Site	\$10,622,300
Phase IV: Continued Water Treatment	\$10,639,328
Phase IV: Continued Reclamation	\$4,892,300
Phase V: Post Closure Monitoring	\$104,800
<b>Direct Cost Subtotal</b>	<b>\$29,008,428</b>
<b>Indirect Costs</b>	
Mobilization/Demobilization (5%)	\$820,840
Contractor Profit and Overhead (15%)	\$4,474,390
Performance Bond (3%)	\$1,029,110
Insurance (1.5%)	\$514,555
Contract Administration (4%)	\$1,433,893
Engineering Redesign (3%)	\$621,460
Contingency (15%)	\$5,377,098
<b>Indirect Cost Subtotal</b>	<b>\$14,271,346</b>
<b>Direct + Indirect Total</b>	<b>\$43,279,773</b>
Inflation (2.66%)	\$1,150,099
<b>TOTAL</b>	<b>\$44,430,000<sup>1</sup></b>
<sup>1</sup> The financial responsibility will be reevaluated and adjusted as allowed in section 1.11.2 or as requested by the permittee.	

RED DOG MINE

<b>Premature Closure Scenario</b>						
<b>Years</b>	<b>Suspension</b>	<b>Closure Earthwork and other Reclamation</b>	<b>Closure Water Treatment</b>	<b>Post-Closure</b>	<b>Cash Flows</b>	<b>Net Present Value</b>
<i>(after suspension of mining)</i>	<i>(site maintenance &amp; ongoing water treatment)</i>			<i>(perpetual annual water treatment)</i>		<i>(at a 4.3% estimated real rate of return)</i>
1	\$13,290,000				\$13,290,000	\$305,150,000
2	\$13,290,000				\$13,290,000	
3	\$13,290,000				\$13,290,000	
4	\$13,290,000				\$13,290,000	
5	\$13,290,000				\$13,290,000	
6		\$25,900,000	\$7,850,000		\$33,750,000	
7		\$25,900,000	\$7,850,000		\$33,750,000	
8				\$10,540,000	\$255,656,279	
9 and thereafter				\$10,540,000	\$10,540,000	

*Cash flow for year 8 equals the present value of an account that earns \$10,540,000 annually in perpetuity plus first year post-closure expenses of \$10,540,000.*

# ROCK CREEK MINE

## Phase 2 Rock Creek Reclamation and Bond Estimate Summary

Cost Element	Total
<b>Direct Costs</b>	
Area 1: Plant Site	\$ 936,124
Area 2: Main & Walsh Pits	\$ 2,447,036
Area 3: Tailings Storage Facility & DC #3	\$ 1,540,006
Area 4: Injection Well Fields & DC #2	\$ 455,273
Area 5: Explosive Storage Area & West Pit	\$ 487,089
Area 6: Diversion Channel #1	\$ 362,760
Area 7 Roads & Rock Creek Causeway	\$ 621,159
Standby Adjustment	\$ 89,055
Long Term Monitoring	\$ 92,000
Water Treatment	\$ 144,567
Mobilization	\$ 449,968
Demobilization	\$ 299,979
Freight costs (12% of material cost)	\$ 79,400
Haul Road Maintenance	\$ 206,907
Man Camp @ 152.40/man-day	\$ 624,992
Field Support Labor	\$ 1,040,961
Administrative Cost	\$ 74,230
<b>Direct Subtotal</b>	<b>\$ 9,951,506</b>
<b>Indirect Costs</b>	
Insurance (1.6% of equipment cost)	\$ 43,582
Contractor overhead and profit (15%)	\$ 1,405,514
Engineering Re-Design (3%)	\$ 323,268
Performance & Payment Bond (3%)	\$ 342,018
State Management and Oversight (1%)	\$ 120,659
<b>Indirect Subtotal</b>	<b>\$ 2,235,041</b>
<b>Contingency (Direct + Indirect)*10%</b>	<b>\$ 1,218,655</b>
<b>Phase 2 Project Estimate</b>	<b>\$ 13,405,202</b>

## KENSINGTON MINE

	Percentage	Amount	Subtotal	Total
<b>Direct &amp; Post-Closure Cost Subtotal</b>			\$16,001,492	
<b>Indirect Cost Category</b>				
Contractor Profit	10.00%	\$1,600,149		
Contractor Overhead	5.00%	\$800,075		
Performance Bond	1.50%	\$240,022		
Payment Bond	1.50%	\$240,022		
Liability Insurance	1.50%	\$240,022		
Contract Administration	7.00%	\$1,120,104		
Engineering Redesign	5.00%	\$800,075		
Scope Contingency	12.00%	\$1,920,179		
Bid Contingency	4.00%	\$640,060		
<b>Indirect Cost Subtotal</b>			\$7,600,709	
<b>Other</b> (inflation compounded over 5 more years)	3.50%		\$4,429,810	
<b>Other</b> (long term dam inspections and maintenance)			\$695,000	
<b>Total</b>				\$28,727,011
Direct Costs (\$Million)			\$16.00	
Indirect Cost (\$Million)			\$7.60	
Indirect/Direct			0.475	