

## **APPENDIX B – ABANDONMENT & RECLAMATION COST ESTIMATE**

## BACK RIVER RECLAMATION ESTIMATE - GEORGE Jan 2013

ACTIVITY/MATERIAL	UNITS	QUANTITY	UNIT COST	COST	
Exploration Activities					
Drill Hole locations					
Cement	30kg bags	0	\$84	\$0	drill location reclamation would be part of on-going exploration costs; it is assumed that some reclamation may not occur each year.
Other (helicopter support)	hours	5	\$2,100	\$10,500	
Personnel to flush casing and cement	days	7	\$320	\$2,240	
Subtotal Drill Locations				\$12,740	\$12,740
Trench					
Backfill trenches/recontour	days	0	\$400	\$-	
Subtotal Trenches				\$0	\$0
Building and Equipment					
EQUIPMENT					
Disassemble and pickup for transport	days	84	\$320	\$26,880	assumes 7 people for 15 days; includes on-site work and cat-haul to Goose assumes 7 people for 7 days; includes on-site work and cat-haul to Goose
Other (unused drilling steel/material)	days	49	\$320	\$15,680	
BUILDINGS					
Buildings (based on end of 2012 season inventory) dissemble and pack for transport	days	189	\$320	\$60,480	assumes 7 people for 27days; equivalent to 1500m2 at \$40/m2 based on NWB "high" unit costs (\$30 to dissemble and \$10 to burn) included in "dispose equipment-other"; progressive reclamation during exploration program will also include
pack boneyard waste	m3			\$0	
SPECIALIZED ITEMS					
helicopter support	hours	5	\$2,100	\$10,500	
Subtotal Buildings and Equipment				\$113,540	\$113,540
Chemicals and Contaminated Soils					
FUEL					
each year fuel on-site is sufficient to cover proposed annual program and every effort will be made to minimize the fuel needed for off-site shipment; based on NWB "high" unit costs shipping and handling remaining fuel off-site; equivalent is 24 (205L) drums					
WASTE OIL					
prep for transport diesel, av gas, propane	litre	5000	\$1	\$4,650	
Oils/lubricants - prep to transport off-site	litre	0	\$1	\$0	
Personnel					
helicopter support	hours	3	\$2,100	\$6,300	
Subtotal Chemicals and Contaminated Soils				\$10,950	\$10,950
Mobilization and Camp Operation					
MOBILIZE HEAVY EQUIPMENT FROM SITE TO REGIONAL CENTRE					
cat-haul to Goose		63	\$320	\$20,160	assumes 3 round trips to Goose for 7 people; each trip is 3 days including loading and unloading not applicable not applicable
barge					
air support (helicopter) herc flights		2	\$29,100	\$58,200	
CAMP OPERATION					
support personnel (cook, first aid, super)	days	300	\$298	\$89,400	assumes 5 people for 2 months equivalent to 7 people doing George reclamation for approx 2 months
	days	476	\$298	\$141,848	
PERMITTING	lump sum			\$5,000	
Subtotal Mobilization				\$314,608	\$314,608
Clean up and Reclamation					
CLEAN UP					
Decontaminate buildings and equipment	days	35	\$320	\$11,200	assumes 7 people for 5 days assumes 7 people for 5 days
Site clean up	days	35	\$320	\$11,200	
RECLAIM CAMP, ROADS & AIRSTRIP					
Scarify and install water breaks	days	14	\$320	\$4,480	personnel equivalent is 2 days of 7 people @\$320 ea/day>NWB "high" unit costs
Revegetation (fertilizer & peat)	bulk	1	12,000	\$12,000	
Subtotal Reclamation				\$38,880	\$38,880
Post Closure Monitoring and Maintenance					
Monitoring during reclamation					
Water sampling	each	12	\$500	\$6,000	not completed in camp
Reporting	days	1	\$325	\$325	
Other (helicopter support)	hours	3	\$2,100	\$6,300	
Post Closure Inspections					
Annual Inspection	each	2	\$10,000	\$20,000	
Subtotal Post Closure Monitoring and Maintenance				\$32,625	\$32,625
Subtotal Capital Costs to Close				\$523,343	
PROJECT MANAGEMENT				3 % of subtotal	\$15,700
ENGINEERING				0 % of subtotal	\$0
CONTINGENCY				10 % of subtotal	\$52,334
GRAND TOTAL - CAPITAL COSTS					\$591,378

NOTES: 2012 assumptions

assumes George is closed and reclaimed as part of progressive reclamation during exploration. these activities are the base strategy for anticipated tasks in the event that exploration activities cease in a controlled scenario that leaving the site will be "controlled" exit with more than one season available to complete that all improvements and assets will be removed and site returned to pre-exploration conditions every effort will be done to minimize time to complete unit cost sources are outlined in spreadsheet and where available 2011 site specific data is used mobilization off site will be principally via cat-haul to Goose demobilization of drillings and drill equipment/supplies/material to be completed under contractual agreement post closure monitoring and inspection will occur for 2 years post