Baffinland Iron Mines Corporation

2011 ABANDONMENT AND RECLAMATION PLAN

Appendix G-3
Cost Estimation Details for Closure

Project Site Abandonment

Total Labour 35

	Year	Labor				Equipment																
		Units	# Units	Unit Rate	Cost	Units	# Units	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency (%)	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
TOTALS					$ 37,206				$ 11,900	$ 49,106	$ 49,106	$ -	$ -	$ -	$ -	$ -	8%	$ 4,146			
Pre-abandonment shutdown	1				$ -				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		$ -			
Drain, isolate and secure camp water systems	1	Person Day			$ -	Hours			$ -	$ -						$ -	0%	$ -			
Drain, isolate and secure Camp sewage treatment plant, lines and lagoons	1	Person Day			$ -	Hours			$ -	$ -						$ -	0%	$ -			
Drain, isolate and secure all local fuel storage supply systems	1	Person Day			$ -	Hours			$ -	$ -						$ -	0%	$ -			
Isolate and secure all bulk fuel storage systems such that tanks and bladders are isolated and contained within secondary containment	1	Person Day			$ -	Hours			$ -	$ -						$ -	0%	$ -			Operations Manager, officers of the company and Board of Directors have a legal requirement and personally liability to ensure the health & safety of employees and the security of the site to prevent any short term adverse effect on the environment. Water, sewage, fuel, power & hazardous material will be secured before site is abandoned. This work will be conducted by Baffinland Staff prior to abandonment and carries not cost
Secure all barreled fuel in secondary containment	1	Person Day			$ -	Hours			$ -	$ -						$ -	0%	$ -			
Secure all hazardous waste in secondary containment	1	Person Day			$ -	Hours			$ -	$ -						$ -	0%	$ -			
Isolate and safely secure all mechanical and electrical elements.	1	Person Day			$ -	Hours			$ -	$ -						$ -	0%	$ -			

Bulk Sample Pit

Total Labour 0

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Contingency (%)	Contingency ($)	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	# Units	Unit Rate	Cost	Units	# Units	Unit Rate	Cost											
TOTALS					$ -				$ -	$ -	$ -	$ -	$ -	$ -	$ -	0%	$ -			
Decommission bulk sample pit					$ -				$ -	$ -	$ -	$ -	$ -	$ -	$ -	0%				
Remedial blasting for stability		Person Day	0	$0	$ -	Hours	0	$0	$ -	$ -		$ -		$ -		0%	$ -			Pit was assessed as stable in 2008 as per the Nunavut WCSS Mine Inspectors Report. Berms restricting vehicle access to the edge of the mountain constructed in 2008. No blasting required. See Report in Appendix G-4, 2011A&R Plan Estimating Docs\Bulk Sample Pit\WSCC Inspection of Bulk Sample Pit
Remedial excavation for stability		Person Day	0	$0	$ -	Hours	0	$0	$ -	$ -		$ -		$ -		0%	$ -			Pit was assessed as stable in 2008 as per the Nunavut WCSS Mine Inspectors Report. Berms restricting vehicle access to the edge of the mountain constructed in 2008. No remedial excavation required. See Report Appendix G-4, 2011A&R Plan Estimating Docs\Bulk Sample Pit\WSCC Inspection of Bulk Sample Pit
Runoff diversion around top of pit		Person Day	0	$0	$ -	Hours	0	$0	$ -	$ -		$ -		$ -		0%				Documented visual observations conducted during the 2009/2010 freshets confirmed that the pit is free draining during all stages of the freshet melt and through seasonal rain fall events . See photo demonstrating free draining status during freshet Appendix G-4, 2011A&R Plan Estimating Docs\Bulk Sample Pit\July 6 09 bulk sample bench photo - free draining 2009-2010 results of effluent seepage from the pit are below the water license effluent criteria and the concentration limits listed under Schedule 4 of the Metal Mines Effluent Regulations (MMER) indicating surface runoff quality should remain stable. Monitoring will continue but no reclamation activity has been costed. See detailed summary in A&R plan Section 4.2.3
Decommission explosives magazine		Person Day	0	$0	$ -	Hours	0	$0	$ -	$ -		$ -		$ -		0%	$ -			All explosives decommissioned in 2010. No further decommissioning of magazines required.

Mineral Exploration Areas (Deposits No. 1, 2, 3)

Total Labour 37

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency (%)	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	# Units	Unit Rate	Cost	Units	# Units	Unit Rate	Cost												
TOTALS					**$ 19,028**				**$ 60,747**	**$ 79,775**	**$ -**	**$ -**	**$ 79,775**	**$ -**	**$ -**	**$ -**	**10%**	**$ 8,188**			
Decommission mineral exploration areas	3				$ 19,028				$ 60,747	$ 79,775	$ -	$ -	$ 79,775	$ -	$ -	$ -		$ 8,188			
Remove water lines from exploration areas	3	Person Day	12	$439	$ 5,268	Hours	6	$1,590	$ 9,540	$ 14,808			$ 14,808			$ -	15%	$ 2,221		Quantities and scope are well defined	2011 basis - 4 person crew - 3 days. Assume general labour used. See Appendix G-3, 2011 A&R Schedule of Labour,. 6 hours helicopter time to sling down water lines from Deposit #1 . The water lines have been packaged and moved numerous time. Estimate based on historical productivity to package and move piping.
Drill holes filled and residual casings cut	3	Person Day	4	$439	$ 1,756	Hours	18	$1,590	$ 28,620	$ 30,376			$ 30,376			$ -	5%	$ 1,519		Quantities, scope and productivity are well defined. Equipment hours assigned to task at double the historical rate for holes spaced closely together. A conservative 5% contingency has been applied.	2011 basis- Geotech hole reclamation helicopter utilization in 2009 = 0.27 hours/hole with holes spread out across 130miles of railway. Assume the same drill hole reclamation productivity for exploration drills although the exploration holes are all located only kilometers from the main camp. There are 18 holes requiring reclamation at Deposit #1. Assume a very conservative 1 hour per hole, 2 man labour crew with helicopter support. For General labour and helicopter rates see Appendix G-3, 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Level pads, backfill sumps and grade to natural contours	3	Person Day	5	$996	$ 4,980	Hours	60	$217	$ 13,047	$ 18,027			$ 18,027			$ -	15%	$ 2,704		Quantities and scope are well defined. A 15% contingency has been applied to address risk of extended excavator travel time between holes	2011 basis = Assume excavator used to backfill. 18 holes with sumps. Sumps are 3m x 10m x 1.5m = 45m3 each. Assume HEO and 3 hours dozer time/sump to backfill and reclaim each sump. See Appendix G-3, 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Prepare core for long-term site storage adjacent to airstrip	3	Person Day	4	$439	$ 1,756	Hours		$0	$ -	$ 1,756			$ 1,756			$ -	15%	$ 263		Task is essentially complete. A 15% contingency is adequate to cover what is now a small task.	All of the exploration core was moved in to containers for permanent storage in 2010. An allowance has been made to containerized the working inventory of core not containerized under an abandonment scenario. General labour rates applied. See Appendix G-3, 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Inspection and final reclamation of exploration drill hole locations	3	Person Day	2	$439	$ 878	Hours	4	$1,590	$ 6,360	$ 7,238			$ 7,238			$ -	10%	$ 724		Quantities and scope are well defined. A 10% contingency is appropriate for the scope	2011 basis -Deposit 1 - 45; Deposit 2&3 - 23 holes. Although the majority of the reclamation work was completed in 2010, final inspections were not completed and the estimate reflects the full scope of work as outstanding. Scope includes final inspection by helicopter with general labour support. See Appendix G-3, 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Decommission salt mixing stations	3	Person Day	10	$439	$ 4,390	Hours	2	$1,590	$ 3,180	$ 7,570			$ 7,570			$ -	10%	$ 757		Quantities and scope are well defined. A 10% contingency is appropriate for the scope.	2011 basis - Only one helicopter lift is required. Estimate a conservative 2 hours helicopter time to remove salt station from mineral exploration area. Scope to be completed by helicopter with general labour support. See Appendix G-3, 2011 A&R Schedule of Labour, Equipment & Charter Rates Table

Remote Sites

Total Labour 26

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency (%)	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	# Units	Unit Rate	Cost	Units	# Units	Unit Rate	Cost												
TOTALS					$ 15,024				$ 87,768	$ 102,792	$ -	$ -	$ 102,792	$ -	$ -	$ -	9%	$ 9,402			
Remote Sites	3				$ 15,024				$ 87,768	$ 102,792	$ -	$ -	$ 102,792	$ -	$ -	$ -		$ 9,402			
Inspection and final reclamation of geotechnical drill holes and test pit locations	3	Person Day	10	$439	$ 4,390	Hours	33	$1,590	$ 52,470	$ 56,860			$ 56,860			$ -	10%	$ 5,686		Quantities & scope are well defined including the location & number of drill holes and reclamation productivity based on 50% of holes completed. A 10% contingency is deemed appropriate.	2011 Estimate based on actuals labour & helicopter hours to complete exactly half of the holes in 2009 . Assume Helicopter hours = 0.27 hours/hole . See Appendix G-4, 2011A&R Plan Estimating Docs\Remote Sites\Geotech Hole Reclamation Completion Report rev 2_Sept with attachments file for detailed scope of holes requiring reclamation (PDF file), reclamation costs and helicopter utilization assumptions (Excel spreadsheets embedded in PDF). 10 additional helicopter hours added to the 23 hours required to cover additional mobilization time to the south end of the rail alignment.
Removal of casing/thermistors	3	Person Day	6	$439	$ 2,634	Hours	16.2	$1,590	$ 25,758	$ 28,392			$ 28,392			$ -	10%	$ 2,839		Quantities & scope are well defined including the location & number of thermistors. Scope is the same as geotechnical holes and actual unit costs were derived from the completion of a large number of geotech holes reclaimed in 2009. A 10% contingency is appropriate	2011 Estimate revised based on 2009 geotech hole actual reclamation productivity and costs. Helicopter hours = 0.27 hours/hole * 60 holes = 16.2 hours. Labour 1.08 Man hrs/hole* 60 = 65 hours = 6 man days. Scope to be completed by helicopter with general labour support. See Appendix G-3, 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Decommissioning of meteorological stations (3)	3	Person Day	6	$ 800	$ 4,800	Hours	3	$1,590	$ 4,770	$ 9,570			$ 9,570			$ -	5%	$ 479		Scope is well defined and stations are located adjacent to the camps - a 5% no contingency has been applied.	2011 basis = Assume 2 persons /day/station and 1 hour helicopter time support for each. Scope includes demolition and disposal in Landfills. Scope to be completed by helicopter with general labour support. See Appendix G-3, 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Decommissioning of hydrology stations (4)	3	Person Day	4	$ 800	$ 3,200	Hours	3	$1,590	$ 4,770	$ 7,970			$ 7,970			$ -	5%	$ 399		Stations are small units that fit inside the aircraft. Locations are well established. Helicopter hours 50% larger than calculated. A 5% contingency has been applied	2011 Estimate revised. Labour budget 2 persons for 2 days to remove all the hydrology stations. Helicopter hour budget revised based on detailed analysis of flying distance from MR to meters back to MR. Estimated distance is 227knots. Avg Helicopter speed is 120 k/hr. Total flying time is 227 Kn/120kn/hr = 1.9 hrs, therefore assume 3 hours of helicopter time. Scope to be completed by helicopter with general labour support. See Appendix G-3, 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Removal of current meter in Steensby Inlet		Person Day			$ -	Hours			$ -	$ -	$ -					$ -		$ -			The battery for the buoy release mechanism on both units no longer have power. The units are no longer retrievable. No cost applied to task in 2011.

Stockpiles

Total Labour 16

	Year	Labor				Equipment															
		Units	# Units	Unit Rate	Cost	Units	# Units	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
TOTALS					$ 30,876				$ 56,761	$ 87,637	$ -	$ -	$ 87,637	$ -	$ -	$ -	10%	$ 8,764		$ -	
Mary River Stockpiles	3				$ 15,936				$ 29,436	$ 45,372	$ -	$ -	$ 45,372	$ -	$ -	$ -		$ 4,537		$ -	
Grade weathered ore stockpiles at crusher area	3	Person Day	7	$996	$ 6,972	Hours	84	$176	$ 14,776	$ 21,748			$ 21,748			$ -	10%	$ 2,175		Scope and quantities are well defined. Labour productivity is based on 4 years of civil construction in the arctic. In light of the multi year geochemical results, a contingency of 10 % has been applied to cover the e.	27,000 tonnes of non-representative ore exist at crusher pad location. Estimate 7 days of D8 dozer to level and contour the stockpiles. Stockpile volumes have been surveyed (See Appendix B-2 for surveyed as built and Appendix G-4, 2011A&R Plan Estimating Docs\Stockpiles\Ore Stockpile volume calculations) Labour and equipment productivity is well established based on 4 year of civil construction at site. See Operator Labour & Equipment rates in Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Haul and place cover on ore pad area at Mary River	3	Person Day	9	$996	$ 8,964	Hours	108	$136	$ 14,660	$ 23,624			$ 23,624			$ -	10%	$ 2,362			2011 estimate modified to include cover over ore stockpile pads. Assume .3m cover. Stockpile will be graded to maximum height of 4m with side slopes of 2:1.. Volume fill required = 8674 m (surface area)* .33 meter + (551 m (perimeter length)*1.7 meter wide face on slope (2:1 slope with avg height = .3 meter)* .33 meter fill=3202 cubes fill required to cap ore pads. Man days =3202 cubes/32.52 cubes/truck= 296 trips/17 trips /day (@ 40 minutes trip)= 6 man days + Assume 1 loader & dozer support with 4 trucks running = 3 man days for a total of 9. Labour and equipment productivity is well established based on 4 year of civil construction at site. See Operator Labour & Equipment rates in Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table It has been demonstrated from continuous environmental geochemical testing since 2008 that there is virtually no potential for enhanced release of acidity or metals in response to oxidative weathering of the stockpiled material. See Section 3.7 in the A&R plan and Appendix C for supporting geochemical information
Milne Inlet Stockpiles	3				$ 14,940				$ 27,325	$ 42,265	$ -	$ -	$ 42,265	$ -	$ -	$ -		$ 4,227		$ -	
Grade residual ore stockpiles at Milne Inlet	3	Person Day	6	$996	$ 5,976	Hours	72	$176	$ 12,665	$ 18,641			$ 18,641			$ -	10%	$ 1,864		Scope and quantities are well defined. Labour productivity is based on 4 years of civil construction in the arctic. In light of the multi year geochemical results, a contingency of 10 % has been applied to cover the e.	Basis for 2011 - Lump stockpile is 2900 cubes and fines 1060. Dozer the stockpiles across pad area will increase pad height by 0.44m (2900+1060/8674 (area of pad)). Maximum height of pad will be 2.44 meters. Assume 3 days dozer & loader operation. Stockpile volumes have been surveyed (See Appendix B-2 for surveyed as built and Appendix G-4, 2011A&R Plan Estimating Docs\Stockpiles\Ore Stockpile volume calculations.) Labour and equipment productivity is well established based on 4 year of civil construction at site. See Operator Labour & Equipment rates Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Haul and place cover on ore pad area at Milne Inlet	3	Person Day	9	$996	$ 8,964	Hours	108	$136	$ 14,660	$ 23,624			$ 23,624			$ -	10%	$ 2,362			Basis for 2010 estimate same as 2009. Assume .3m cover. Stockpile will be graded to maximum height of 4m with side slopes of 2:1.. Volume fill required = 8674 m (surface area)* .33 meter + (551 m (perimeter length)*1.7 meter wide face on slope (3:1 slope with avg height = .3 meter)* .33 meter fill=3202 cubes fill required to cap ore pads. Man days =3202 cubes/32.52 cubes/truck= 296 trips/17 trips /day (@ 40 minutes trip)= 6 man days + Assume 1 loader & dozer support with 4 trucks running = 3 man days for a total of 9. Stockpile volumes have been surveyed . Labour and equipment productivity is well established based on 4 year of civil construction at site. See operator Labour & Equipment rates in Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table . It has been demonstrated from continuous environmental geochemical testing since 2008 that there is virtually no potential for enhanced release of acidity or metals in response to oxidative weathering of the stockpiled material. See Section 3.7 in the A&R plan and Appendix C for supporting geochemical information

Camps & Related Facilities

Total Labour: 812

		Labor				Equipment														
	Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
GRAND TOTAL Year				$ 983,685				$ 817,231	$ 1,800,916	$ 7,000	$ 585,211	$ 1,201,895	$ 6,810	$ -	$ -	14%	$ 258,827			
Site Contractor Decommissioning and Demob - Mary River Camp 2		**213.5**		**$ 212,646**				**$ 95,696**	**$ 308,342**	**$ -**	**$ 308,342**	**$ -**	**$ -**	**$ -**	$ -		**$ 46,251**			
Decommission/Package mobile equipment 2	Person Day	160	$996	$ 159,360	Hours	80	$138	$ 11,002	$ 170,362		$ 170,362				$ -	15%	$ 25,554		Individual equipment & material were estimated based on detailed material balance of volumes shipped to, consumed at and backhauled from Mary River camp and cost estimates developed. Although the scope of work is well defined, there is some risk to the estimate in terms of the productivity (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	2011 basis - . Assume 45 man days for decommissioning and packaging Nuna & mobile equipment & Boart equipment. Mobile Equipment must remain functional to demobilize on to Mary River therefore requires minimal decommissioning. Estimate based on Contractor equipment list and operator labour rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Ship material by land to Milne Inlet for shipment 2	Person Day	53.5	$996	$ 53,286	Hours	642	$132	$ 84,694	$ 137,980		$ 137,980				$ -	15%	$ 20,697			2011 estimate split in to two tasks. Approximately 50% of the calculated volume is Nuna & Boart owned assets. Estimate split evenly between the decommissioning and demob of Nuna equipment and the remainder of equipment and material in Year 3. Assume equipment rates reflect actual utilization. 75% truck & 25% loader. Recalculated based on reduced salvage volume. Labour & equipment requirements calculated from volume estimates derived from detailed 'Material Balance' worksheet and historical site labour and productivity. All 'Material Balance' volumes based on sealift volume balance supported by sealift transportation provider volume data from 2006 to 2010 (See Appendix G-3 for 2011 Material and Sealift Balance table and Appendix G-4, 2011A&R Plan Estimating Docs\Sealift for all sealift and backhaul sealift manifests) 6568/38 cubes/truck/ 2 truck trips/shift= 86 person shifts + 25% for loader support = 107 person shifts. 107 person shifts & 1284 equipment hours; Estimate based on Contractor equipment list and operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommissioning Mary River camp 3		**241**		**$ 333,752**				**$ 311,635**	**$ 645,387**	**$ -**	**$ -**	**$ 645,387**	**$ -**	**$ -**	$ -		**$ 85,788**			
Decommission 100 man Weatherhaven camp 3	Person Day	42	$996	$ 41,832	Hours	504	$147	$ 74,143	$ 115,975			$ 115,975			$ -	15%	$ 17,396		Estimate based on	Assume land filled - excavator, loader & 4 trucks 7 days. 6 men * 7 days = 42 man days * 12 hours equipment =504. Estimate based on well defined scope, labour & equipment rates and operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission/Package stand alone accommodation/work tent camp (26 Weatherhaven tents) 3	Person Day	12	$996	$ 11,952	Hours	144	$147	$ 21,184	$ 33,136			$ 33,136			$ -	15%	$ 4,970			Assume land filled - excavator, loader & 4 trucks 2 days. 6 men* 2 days =12 man days * 12 hours equipment =144 Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission/Package stand alone accommodation/work tent camp (11 Norseman tents) 3	Person Day	12	$996	$ 11,952	Hours	144	$152	$ 21,874	$ 33,826			$ 33,826			$ -	15%	$ 5,074			Assume land filled - excavator, loader & 4 trucks 2 days. 6 men* 2 days =12 man days * 12 hours equipment =144 Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission concrete sewage tanks 3	Person Day	4	$996	$ 3,984	Hours	48	$177	$ 8,519	$ 12,503			$ 12,503			$ -	5%	$ 625		Scope well defined and time requirement is short	Assume 2 men for 2 days with excavator & Kenworth truck Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Burn appropriate materials or Landfill 3	Person Day	60	$996	$ 59,760	Hours	720	$141	$ 101,220	$ 160,980			$ 160,980			$ -	15%	$ 24,147		Scope volume and haul distances are short and cycle times well defined. Additional allowances included for bulking factors and multiple locations, even though distances are short. A 15% contingency is considered appropriate.	Estimated volume required to burn or landfill = 9282m3. See Appendix G-3, 2011 Mary River Project A & R Plan Material Balance, Total Mary River waste destined for land fill or to be burned. Assume the following productivity. Bulk up volume by 15% to account for expansion from shipping volume. = 10674 m3. - Kenworth truck round trip haul & load time =0.5 hours, a 4 truck fleet and 10.5 hours/day hauling. - Assume D7 and 345 excavator working full time to support demolition and loading. - Man haul days = 10674/27 cubes/truck/10.5 hrs/day/0.5hrs/trip= 19 man days @ 4 trucks/day = 5 day. Assume Supporting equipment required = D7 & 345 & 980 loader for demolition and loading and a D7 dozer for compaction at landfill = 5 haul days * 4 supporting equipment = 20 man days. Assume because this is the majority of bulk movement of material there are multiple small areas requiring consolidation an additional 50% increase in labour = 30 haul track man days and 30 support man haul days. Assume weighted equipment rate based on equipment used. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .

Camps & Related Facilities

Total Labour: 812

		Labor				Equipment														
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
Ship material by land to Milne Inlet for sealift Yr. 3	3	Person Day	107	$996	$ 106,572	Hours	642	$132	$ 84,694	$ 191,266			$ 191,266			$ -	15%	$ 28,690			2011 estimate split in to two tasks. Approximately 50% of the calculated volume is Nuna owned assets. 2010 estimate split evenly between the decommissioning and demob of Nuna equipment and the remainder of equipment and material in Year 3. Basis same as 2009. Revised equipment rates to reflect actual utilization. 75% truck & 25% loader. Recalculated based on reduced salvage volume. Calculated labour & equipment from L14 'Material Balance' 6568/38 cubes/truck/ 2 truck trips/shift= 86 person shifts + 25% for loader support = 107 person shifts. 107 person shifts & 1284 equipment hours;
Electrical Support for all decommissioning work at Mary River and Milne Inlet	3	Person Months	4	$24,425	$ 97,700					$ 97,700			$ 97,700			$ -	5%	$ 4,885		Estimate based on Invoice support for a qualified ticketed electrician. Electrical decommissioning is expected to be completed in less than 2 months. A full four month cost has been applied. A 5% contingency is deemed adequate	Estimate based on contract Labour rate for 1 electrician continuously employed through May through August of Year 3 to support the decommissioning of the Mary River and Milne Inlet camp electrical systems and disconnect power from the Steensby and Midrail camps. See Appendix G-4, 2011A&R Plan Estimating Docs\Camps\Procon Electrical Baffinland Iron - Mary River Project 2011 for quote) Hourly rates equivalent to $6130/week or $24,425/month. Electrical decommissioning expected to take 2 months. Additional two months costed for general support
Organize material for shipment	2		**106**		**$ 72,263**				**$ 45,759**	**$ 118,022**	**$ -**	**$ 72,704**	**$ 45,318**	**$ -**	**$ -**	$ -		**$ 17,703**			
Boart	2	Person Day	28	$800	$ 22,400	Hours	48	$66	$ 3,173	$ 25,573		$ 25,573				$ -	15%	$ 3,836		Individual equipment & material were estimated based on detailed material balance of volumes shipped to, consumed at and backhauled from Mary River camp and cost estimates developed. Although the scope of work is very well defined, there is some risk to the estimate in terms of the productivity estimate (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	2011 Basis - Assume 1 week * 4 men + part time skid steer . Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Nuna	2	Person Day	14	$958	$ 13,412	Hours	72	$125	$ 9,000	$ 22,412		$ 22,412				$ -	15%	$ 3,362			Package Nuna containers, & miscellaneous material for shipping . Assume two warehousemen * 2 weeks & mobile hours part time. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Package BIM sea cans for backhaul	2	Person Day	10	$439	$ 4,390	Hours	12	$66	$ 793	$ 5,183		$ 5,183				$ -	15%	$ 777			2011 Basis - Assume majority of low value inventory to be land filled/burned. BIM inventory to be backhauled is relatively small - CAT parts etc..... Revised equipment rate to reflect use of contractor owned equipment. General labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission/Package 3 shops	2	Person Day	24	$439	$ 10,536	Hours	72	$125	$ 9,000	$ 19,536		$ 19,536				$ -	15%	$ 2,930			Assume CH & Nuna shops packaged. BIM Quonset is land filled. Assume 3 men @4 days/shop + 1 mobile equipment 3 days/shop. General labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission/Package related infrastructure (lines, piping, associated small buildings)	3	Person Day	30	$718	$ 21,525	Hours	180	$132	$ 23,793	$ 45,318			$ 45,318			$ -	15%	$ 6,798			100 man camp genset isolated. Water lines /sewage cut in 30 foot lengths and landfilled. Assume 3 men 7 days + boom truck Existing electrical cables land filled. Excavator required to trench for cable recovery. All small buildings demolished in bulk and shipped to landfill. Assume 3 days each of excavator & loader & haul truck time for demolition of small wooden buildings (9 man days & 180 equipment hours).. Labour updated to reflect 50% general labourer & 50% Operators. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
General site cleanup	3		**73**		**$ 36,503**				**$ 6,550**	**$ 43,053**	**$ -**	**$ 43,053**	**$ -**	**$ -**	**$ -**	$ -		**$ 6,458**			
Loader use for redirecting coarse clean up streams	3	Person Day	8	$996	$ 7,968	Hours	96	$68	$ 6,550	$ 14,518		$ 14,518				$ -	15%	$ 2,178		Individual facilities were identified at the Mary River camp and cost estimates developed. Although the scope of work is very well defined, there is some risk to the estimate in terms of the productivity estimate (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	Use loader to clean up coarse waste streams (burn/landfill). Assume 8 days of loader time to clean up coarse waste. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Clean up residual fine waste on ground	3	Person Day	65	$439	$ 28,535	Hours	0	$0	$ -	$ 28,535		$ 28,535				$ -	15%	$ 4,280			Use Bull gang (labourers) to walk the entire site with half ton truck support to hand pick fine waste from ground and move to landfill. Assume 10 labourers walking + 3 driving for 5 days. Truck rates covered in general camp decommissioning. General labour rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Contouring & grading	3		**25**		**$ 24,900**				**$ 41,512**	**$ 66,412**	**$ -**	**$ -**	**$ 66,412**	**$ -**	**$ -**	$ -		**$ 9,962**			
Coarse contouring - Dozer	3	Person Day	10	$996	$ 9,960	Hours	120	$149	$ 17,910	$ 27,870			$ 27,870			$ -	15%	$ 4,181		Individual facilities were identified at the Mary River camp and cost estimates developed. Although the scope of work is well defined, there is	Dozer work for uncounted gray water pits and 100 man camp pad. (assume entire tote road, & landfill road to remain in operating condition). Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .

Camps & Related Facilities

Total Labour: 812

		Labor				Equipment														
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
Coarse contouring - loader & excavator	3	Person Day	8	$996	$ 7,968	Hours	96	$149	$ 14,328	$ 22,296			$ 22,296			$ -	15%	$ 3,344		some risk to the estimate in terms of the productivity estimate (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	Loader & excavator hours road to camp lake & other minor work. Assume 4 man days each. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Final grading	3	Person Day	7	$996	$ 6,972	Hours	84	$110	$ 9,274	$ 16,246			$ 16,246			$ -	15%	$ 2,437			Assume 7 days of grader operation. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission Refuge Sites	3		**2**		**$ 1,992**				**$ 904**	**$ 2,896**	**$ -**	**$ -**	**$ 2,896**	**$ -**	**$ -**	$ -		**$ 145**			
Decommission refuge sites	3	Person Day	2	$996	$ 1,992	Hours	8	$113	$ 904	$ 2,896			$ 2,896			$ -	5%	$ 145		Scope well defined and time requirement is short	Labour & equipment to complete work - 2 sites on tote road. Equipment rate updated to reflect use of haul truck and Loader. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Site Contractor Decommissioning and Demob - Milne Inlet Camp	2		**70**		**$ 71,440**				**$ 20,359**	**$ 91,799**	**$ -**	**$ 91,799**	**$ -**	**$ -**	**$ -**	$ -		**$ 13,770**			
Decommission/Package Shanco Camp (10 trailers)	2	Person Day	40	$898	$ 35,920	Hours	48	$166	$ 7,982	$ 43,902		$ 43,902				$ -	15%	$ 6,585		Individual facilities were identified at the Milne Inlet camp and cost estimates developed. Although the scope of work is well defined, there is some risk to the estimate in terms of the productivity estimate (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	Labour rate updated to reflect 50/50 shanco tech & Nuna HEO. Equip. rate reflects 75/25 use of D7 & excavator. . Entire camp was installed in 2 days with a dozer & a crane. Upon completion of labour, skidding of camp to beach lay down area can be accomplished in less time than assembly. Assume 36 hours D7 and 12 excavator. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission remaining mobile equipment	2	Person Day	30	$1,184	$ 35,520	Hours	90	$138	$ 12,377	$ 47,897		$ 47,897				$ -	15%	$ 7,185		Estimate a based on list or remaining contractor equipment at site. Although the scope of work is well defined, there is some risk to the estimate in terms of the productivity estimate (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	2011 estimate reflecting the reduced quantity of equipment present at Milne Inlet and demobilized in previous years and historical mechanic labour to execute sealift demobilization. Mechanic labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission Milne Inlet camp (4 month operation @ Avg 4 person/day)	3		**52**		**$ 50,678**				**$ 81,717**	**$ 132,395**	**$ -**	**$ -**	**$ 125,585**	**$ 6,810**	**$ -**	$ -		**$ 19,859**			
Decommission/Package other stand alone work tents (9 wood structure tents)	4	Person Day	4	$718	$ 2,870	Hours	24	$164	$ 3,940	$ 6,810				$ 6,810		$ -	15%	$ 1,021		Individual facilities were identified at the Milne Inlet camp and cost estimates developed. Although the scope of work is well defined, there is some risk to the estimate in terms of the productivity estimate (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	Remove canvass & burn. Assume 4 guys 1 day + excavator & haul truck for wood to burn. Equipment rates updated to reflect 50/50 use of excavator & haul truck. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Truck waste from Milne Inlet Camp to Mary River Camp for land filling	3	Person Day	48	$996	$ 47,808	Hours	576	$135	$ 77,777	$ 125,585			$ 125,585			$ -	15%	$ 18,838		Scope volume and haul distances are short and cycle times well defined. Additional allowances included for bulking factors and multiple locations, even though distances are short. A 15% contingency is considered appropriate.	Estimated volume required to burn or landfill =1075m3. See Appendix G-3, 2011 Mary River Project A & R Plan Material Balance, Total Milne Inlet waste destined for land fill or to be burned. Assume the following productivity. Bulk up volume by 20% to account for expansion from shipping volume. =1290 m3. - Kenworth truck round trip haul & load time =5.5 hours, a 4 truck fleet and 11 hours/day hauling. - Assume D7 and 345 excavator working full time to support demolition and loading. - Man haul days = 1290/27 cubes/truck/11 hrs/day/5.5hrs/trip= 24 man days @ 4 trucks/day = 6 days. Assume Supporting equipment required = D7 & 345 =6haul days *2 supporting equipment = 12 man days. Assume because this is the majority of bulk movement of material there are multiple small areas requiring consolidation an additional 50% increase in labour for haul trucks= 36 haul track man days and 12 support man haul days=48 man days total Assume weighted equipment rate based on equipment used. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Organize material for shipment	3		**108**		**$ 80,886**				**$ 23,019**	**$ 103,905**	**$ 7,000**	**$ 69,313**	**$ 27,592**	**$ -**	**$ -**	$ -		**$ 15,586**			

Camps & Related Facilities

Total Labour: 812

		Labor				Equipment														
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
Nuna	2	Person Day	42	$958	$ 40,236	Hours	72	$67	$ 4,836	$ 45,072	$ 7,000	$ 38,072				$ -	15%	$ 6,761		Individual equipment & material were estimated based on detailed material balance of volumes shipped to, consumed at and backhauled from Milne Inlet camp and cost estimates developed. Although the scope of work is very well defined, there is some risk to the estimate in terms of the productivity estimate (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	Package Nuna containers, & miscellaneous material for shipping . Assume 1 warehousemen 6 weeks. Labour & Equipment rates updated. Equipment assumes 50/50 use of bobcat & 930 loader. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
BIM Barge Loader	2	Person Day	12	$958	$ 11,496	Hours	24	$166	$ 3,984	$ 15,480		$ 15,480				$ -	15%	$ 2,322			Requires Vendor to supply 2 persons for 4 days + 1 mobile equipment operator & Crane. Apply the Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission/Package 1 shops	2	Person Day	20	$600	$ 12,000	Hours	48	$78	$ 3,761	$ 15,761		$ 15,761				$ -	15%	$ 2,364			Assume manpower & equipment hours to decommission shop & lined floor. Assume 4 men for 5 days with 4days loader support. Equipment rate revised to reflect use of contractor owned bob cat for disassembly and 12 hours use of Nuna loader to remove sand cover & liner. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission/Package related infrastructure (lines, piping, associated small buildings)	3	Person Day	34	$505	$ 17,154	Hours	48	$217	$ 10,438	$ 27,592			$ 27,592			$ -	15%	$ 4,139			Shanco camp genset isolated. No permanent Water lines. Sewage lines disassembled and land filled. No water lines. Excavator required to trench for cable recovery. Electrical cables land filled. . All small buildings demolished in bulk and shipped to landfill. Labour revised to 3 labourers for 10 days and equipment remains the same as costed, description changed to match costing - 4 days excavator Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
General site cleanup	3		**31**		**$ 16,394**				**$ 6,908**	**$ 23,302**	**$ -**	**$ -**	**$ 23,302**	**$ -**	**$ -**	$ -		**$ 3,495**			
Loader use for redirecting coarse clean up streams	3	Person Day	5	$996	$ 4,980	Hours	60	$115	$ 6,908	$ 11,888			$ 11,888			$ -	15%	$ 1,783		Individual facilities were identified at the Milne Inlet camp and cost estimates developed. Although the scope of work is well defined, there is some risk to the estimate in terms of the productivity estimate (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	Use loader to clean up coarse waste steams (burn/landfill). Assume 5 days of loader time to clean up coarse waste. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Clean up residual fine waste on ground	3	Person Day	26	$439	$ 11,414	Hours	0	$0	$ -	$ 11,414			$ 11,414			$ -	15%	$ 1,712			Use Bull gang (labourers) to walk the entire site with half ton truck support to hand pick fine waste from ground and move to landfill. Assume 10 labourers walking + 3 driving + 3 half tons. 2 days. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Contouring & grading	3		**12**		**$ 10,368**				**$ 21,146**	**$ 31,514**	**$ -**	**$ -**	**$ 31,514**	**$ -**	**$ -**	$ -		**$ 4,727**			
Coarse contouring - Dozer	3	Person Day	4	$996	$ 3,984	Hours	48	$149	$ 7,164	$ 11,148			$ 11,148			$ -	15%	$ 1,672		Individual facilities were identified at the Mary River camp and cost estimates developed. Although the scope of work is well defined, there is some risk to the estimate in terms of the productivity estimate (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	Dozer work for camp roads & other minor work. Assume 4 days. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Coarse contouring - loader & excavator	3	Person Day	4	$996	$ 3,984	Hours	48	$166	$ 7,982	$ 11,966			$ 11,966			$ -	15%	$ 1,795			Loader & excavator hours - Contour camp roads & other minor work. Assume2 man days each. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Final grading	3	Person Day	4	$600	$ 2,400	Hours	48	$125	$ 6,000	$ 8,400			$ 8,400			$ -	15%	$ 1,260			Assume 4 days of grader operation. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission Mid-Rail Camp (14 days @ 6 man camp)	3		**76**		**$ 33,364**				**$ 95,400**	**$ 128,764**	**$ -**	**$ -**	**$ 128,764**	**$ -**	**$ -**	$ -		**$ 19,315**			
Decommission/Package stand alone accommodation/work tent camp	3	Person Day	36	$439	$ 15,804	Hours			$ -	$ 15,804			$ 15,804			$ -	15%	$ 2,371		Individual facilities were identified at the Milne Inlet camp and cost estimates developed. Although the scope of work is very well defined, there is some risk to the estimate in terms of the productivity estimate (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	2011 Basis - (18 wood structure tents) Assumes 6 man crew 6days to completely decommission the camp. Assume 1 working supervisor & 5 labourers. General labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission/Package genset and incinerator	3	Person Day	4	$439	$ 1,756	Hours			$ -	$ 1,756			$ 1,756			$ -	15%	$ 263			
Decommission tent camp and related infrastructure (lines, piping, associated buildings)	3	Person Day	8	$439	$ 3,512	Hours			$ -	$ 3,512			$ 3,512			$ -	15%	$ 527			
Decommission lay down areas	3	Person	2	$439	$ 878	Hours			$ -	$ 878			$ 878			$ -	15%	$ 132			
General site cleanup	3	Person Day	6	$439	$ 2,634	Hours			$ -	$ 2,634			$ 2,634			$ -	15%	$ 395			
Fly waste from Mid Rail Camp to Mary River Camp for lanfilling	3	Person Day	20	$439	$ 8,780	Hours	60	$1,590	$ 95,400	$ 104,180			$ 104,180			$ -	15%	$ 15,627			
Decommission Steensby Inlet Camp (14 Days @ 6 man camp)	3		**86**		**$ 38,499**				**$ 66,626**	**$ 105,125**	**$ -**	**$ -**	**$ 105,125**	**$ -**	**$ -**	$ -		**$ 15,769**			
Decommission/Package stand alone accommodation/work tent camp (25 wood structure tents)	3	Person Day	48	$439	$ 21,072	Hours	36	$66	$ 2,380	$ 23,452			$ 23,452			$ -	15%	$ 3,518			2011 Basis - Assume 6 man operation for 8 days . Equipment costed at 3rd party contractor rate. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .

Camps & Related Facilities

Total Labour: 812

		Labor				Equipment															
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
Decommission/package genset and incinerator	3	Person Day	4	$439	$ 1,756	Hours	4	$66	$ 264	$ 2,020			$ 2,020			$ -	15%	$ 303		Individual facilities and materials were identified at the Steensby camp and cost estimates developed. Although the scope of work is well defined, there is some risk to the estimate in terms of the productivity estimate (time requirements). Hence a 15% contingency is warranted to cover a potentially larger number of hours to complete the work.	2011 Basis -Assume 4 persons 1 day, general labour and equipment cost. Equipment costed at 3rd party contractor rate. General labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission related infrastructure (lines, piping, associated buildings)	3	Person Day	6	$439	$ 2,634	Hours	0	$66	$ -	$ 2,634			$ 2,634			$ -	15%	$ 395			2011 basis - Assume 3 persons for 2 days. Equipment costed at 3rd party contractor rate. General labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission lay down areas	3	Person Day	12	$439	$ 5,268	Hours	36	$66	$ 2,380	$ 7,648			$ 7,648			$ -	15%	$ 1,147			2011 Basis - Assume 4 persons for 3 days to clean up camp to decommission camp lay down area. Sealift lay down area requires no decommissioning - Material ready to ship. Equipment costed at 3rd party contractor rate. General labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission fuel storage (200 drums of fuel)	3	Person Day	2	$439	$ 878	Hours	12	$66	$ 793	$ 1,671			$ 1,671			$ -	15%	$ 251			2011 basis - Only 180 drums remain at the camp. Assume 2 man days labour, & equipment to re-strap partial pallets Equipment costed at 3rd party contractor rate. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
General site cleanup	3	Person Day	6	$439	$ 2,634	Hours	24	$66	$ 1,586	$ 4,220			$ 4,220			$ -	15%	$ 633			2011 Basis -Assume 3 persons 2 days. Equipment costed at 3rd party contractor rate. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Decommission remaining mobile equipment (4 pieces)	3	Person Day	2	$812	$ 1,623	Hours	6	$66	$ 397	$ 2,020			$ 2,020			$ -	15%	$ 303			2011 Basis - Assume 1 mechanic and one operator for 1 day to drain fuel tanks - This is the only requirement for sealift. Equipment costed at 3rd party contractor rate. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Organize material for shipment and sealift support	3	Person Day	6	$439	$ 2,634	Hours	24	$66	$ 1,586	$ 4,220			$ 4,220			$ -	15%	$ 633			2010 Basis -Assume 2 person for sealift support for 3 days. Assume Labour and equipment cost. Equipment costed at 3rd party contractor rate. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Steensby Port resupply by Helicopter	3	Person Day	0	$0	$ -	Hours	36	$1,590	$ 57,240	$ 57,240			$ 57,240			$ -	15%	$ 8,586			2010 Basis same as 2009 - Hours are for removal of the floating dock and water line (12) + 12 hours/week *2 week demob+sealift support. See helicopter rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .

Roads & Airstrips

Total Labour 2063.5

175808

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
GRAND TOTAL					**$ 1,679,929**				**$ 772,930**	**$ 2,452,859**	**$ -**	**$ 457,985**	**$ 526,942**	**$ 1,467,932**	**$ -**	$ -	12%	**$ 294,865**			
Year 2 Freshet Management Field Activities	2		480		$ 356,384				$ -	$ 356,384	$ -	$ 356,384	$ -	$ -	$ -	$ -		$ 17,819			
Direct Freshet Management Cost	2	Lot	1	$356,384	$ 356,384	Hours			$ -	$ 356,384		$ 356,384				$ -	5%	$ 17,819		The 2011 estimate was based on 2009 actual cost which included significant culvert and road upgrades completed during the freshet period to reduce future maintenance requirements thus contains significant contingency. A 5% contingency has been applied	Cost estimate based on the highest annual total contractor expenditure for complete freshet management from the two documented and completed years (2009 & 2010). 2009 was the highest year and the contractor invoices for May ($175,808) + and June ($180,576) are attached are attached. Direct Freshet Management Cost includes: - Single lane snow removal from the Milne Inlet Tote Road. - Snow removal from the inlet and outlet of culverts as required - Steam cleaning of culverts as required. - Monitoring of drainage water flows throughout the freshet period and response to identified drainage issues - Road repairs as required. These annual expenditures included significant road upgrades and is thus considered an ultra conservative cost estimate for Freshet Management Only. This budget covers the period from the road being opened May 1 until Freshet ended on June 15 . 3rd party contractor all inclusive freshet costs for May and June are included in Appendix G-4, 2011A&R Plan Estimating Docs\Roads & Airstrips\ Files - 2009 June Freshet invoice cost from 3rd party contractor and 2009 May Freshet invoice cost from 3rd party contractor
Year 3 Freshet Management Field Activities	3		480		$ 356,384				$ -	$ 356,384	$ -	$ -	$ 356,384	$ -	$ -	$ -		$ 17,819			
Direct Freshet Management Cost	3	Lot	1	$356,384	$ 356,384	Hours			$ -	$ 356,384			$ 356,384			$ -	5%	$ 17,819		The 2011 estimate was based on 2009 actual cost which included significant culvert and road upgrades completed during the freshet period to reduce future maintenance requirements thus contains significant contingency. A 5% contingency has been applied	Cost estimate based on the highest annual total contractor expenditure for complete freshet management from the two documented and completed years (2009 & 2010). 2009 was the highest year and the contractor invoices for May ($175,808) + and June ($180,576) are attached are attached. Direct Freshet Management Cost includes: - Single lane snow removal from the Milne Inlet Tote Road. - Snow removal from the inlet and outlet of culverts as required - Steam cleaning of culverts as required. - Monitoring of drainage water flows throughout the freshet period and response to identified drainage issues - Road repairs as required. These annual expenditures included significant road upgrades and is thus considered an ultra conservative cost estimate for Freshet Management Only. This budget covers the period from the road being opened May 1 until Freshet ended on June 15 . 3rd party contractor all inclusive freshet costs for May and June are included in Appendix G-4, 2011A&R Plan Estimating Docs\Roads & Airstrips\ Files - 2009 June Freshet invoice cost from 3rd party contractor and 2009 May Freshet invoice cost from 3rd party contractor
Year 4 Freshet Management Field Activities	4		480		$ 356,384				$ -	$ 356,384	$ -	$ -	$ -	$ 356,384	$ -	$ -		$ 17,819			

Roads & Airstrips

Total Labour 2063.5

175808

		Labor				Equipment															
	Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
Direct Freshet Management Cost 4	Lot	1	$356,384	$ 356,384	Hours			$ -	$ 356,384				$ 356,384		$ -	5%	$ 17,819		The 2011 estimate was based on 2009 actual cost which included significant culvert and road upgrades completed during the freshet period to reduce future maintenance requirements thus contains significant contingency. A 5% contingency has been applied	Cost estimate based on the highest annual total contractor expenditure for complete freshet management from the two documented and completed years (2009 & 2010). 2009 was the highest year and the contractor invoices for May ($175,808) + and June ($180,576) are attached are attached. Direct Freshet Management Cost includes: - Single lane snow removal from the Milne Inlet Tote Road. - Snow removal from the inlet and outlet of culverts as required - Steam cleaning of culverts as required. - Monitoring of drainage water flows throughout the freshet period and response to identified drainage issues - Road repairs as required. These annual expenditures included significant road upgrades and is thus considered an ultra conservative cost estimate for Freshet Management Only. This budget covers the period from the road being opened May 1 until Freshet ended on June 15 . 3rd party contractor all inclusive freshet costs for May and June are included in Appendix G-4, 2011A&R Plan Estimating Docs\Roads & Airstrips\ Files - 2009 June Freshet invoice cost from 3rd party contractor and 2009 May Freshet invoice cost from 3rd party contractor
MI Tote Road Operation				**$ 23,904**				**$ 31,795**	**$ 55,699**	**$ -**	**$ 55,699**	**$ -**	**$ -**	**$ -**	$ -		**$ 5,570**			
Operate Tote road for shipments 3	Person Day	24	$996	$ 23,904	Hours	288	$110	$ 31,795	$ 55,699		$ 55,699				$ -	10%	$ 5,570		The tote road operating grading requirements are based on 2 years of well established maintenance. A moderate contingency has been applied.	Basis for 2011 Estimate revised based on 2009/2010 operating experience. Assume Road maintenance required for 10 weeks from June 30 until Sept 30 . 24 hours grading/week for 12 weeks.
#1 Deposit Haul Roads				**$ 64,242**				**$ 106,316**	**$ 170,558**	**$ -**	**$ -**	**$ 170,558**	**$ -**	**$ -**	$ -		**$ 25,552**			
Inspect and repair any erosion on #1 Deposit Rd. and cross grade road 3	Person Day	10	$996	$ 9,960	Hours	240	$138	$ 33,005	$ 42,965			$ 42,965			$ -	15%	$ 6,445		Scope is well defined with supportding as built drawings and documentation. A 15% contingency is deemed appropriate to address productivity estimates.	Basis for 2011 - Assume grader hours to cross grade slope of road in to mountain side to prevent water flow to the outside of the road and control erosion. A conservative productivity estimate of the blended equipment use has been applied to the estimate. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Stabilize inside ditches with cobble 3	Person Day	30	$996	$ 29,880	Hours	240	$138	$ 33,005	$ 62,885			$ 62,885			$ -	15%	$ 9,433			Basis for 2011- Majority of the ditches sections of the haul road have been stabilized. Stabilization of 500 meters of ditch with coarse and cobble have been costed. A conservative productivity estimate of the blended equipment use has been applied to the estimate. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Remove round culverts, install water bars and stabilize water crossings 3	Person Day	20	$996	$ 19,920	Hours	240	$138	$ 33,005	$ 52,925			$ 52,925			$ -	15%	$ 7,939			Basis for 2011 - Execute and remove the thirteen round culverts and cut road embankment down to the coarse road bed. Apply cobble and coarse material as required to stabilize water crossings. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table. As built and culvert details are identified in Appendix B-4 and B-5.
Install safety berms restricting vehicle access at the location where the haul road enters the bulk sample pit 3	Person Day	0.5	$996	$ 498	Hours	1	$138	$ 138	$ 636			$ 636			$ -	10%	$ 64			Basis for 2011- Install to safety berms. A conservative productivity estimate of the blended equipment use has been applied to the estimate. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Re-grade pad & repair any erosion at #1 deposit salt station 3	Person Day	4	$996	$ 3,984	Hours	48	$149	$ 7,164	$ 11,148			$ 11,148			$ -	15%	$ 1,672			Basis for 2011 - Grade road with crown to promote drainage. A conservative productivity estimate of the blended equipment use has been applied to the estimate. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Milne Inlet Tote Road				**$ 496,008**				**$ 615,540**	**$ 1,111,548**	**$ -**	**$ -**	**$ -**	**$ 1,111,548**	**$ -**	$ -		**$ 204,463**			

Roads & Airstrips

Total Labour 2063.5

175808

		Labor				Equipment														
	Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
Inspect and repair any erosion on Tote Road	4 Person Day	20	$996	$ 19,920	Hours	240	$138	$ 33,005	$ 52,925				$ 52,925		$ -	15%	$ 7,939		Scope is well defined with supportding as built drawings and documentation. A 15% contingency is deemed appropriate to address productivity estimates.	Basis for 2011- Assume Milne InletTote road includes road from Milne to base of deposit #1 haul road. The Milne Inlet Tote road has been generally stable since it was upgraded in 2008 as part of the Bulk Sample Program. A small number of very small unstable areas were identified in 2009 and repairs executed under the direction of a professional engineer. Otherwise, the road had been stable since its construction. In both cases the tote road has been stable in all non-water crossing areas for over 2 years. Assume scope of work generally includes grading a 1-2% crown the length of the road to promote drainage. No other major work is required. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Remove all box culvert crossings and stabilize slopes	4 Person Day	108	$996	$ 107,568	Hours	1296	$138	$ 178,226	$ 285,794				$ 285,794		$ -	15%	$ 42,869			Basis for 2011 - Assume removal of box culverts and abutments, removal of fill to back the high water mark and regraded to the natural slope as described in the A&R Plan report technical spec. Km 80 box culvert crossing (up to the abutments) was removed in 2009 without damaging any steel in 3 shifts with a crew of six operators. In a reclamation scenario work could be completed in 1.5 days. Assume an average of another 4 days on average to remove abutments and fill back to high water mark days. Assume 2 pieces of equipment operating for removal of box culvers and 6 for each of the 4 days that the abutment and fill is being removed. See the following references for scope (Figures 8.10 and 8.11) and as-built detail (Appendices B-4, B-5 and B-6) See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Install water bars (road embankment cross cuts) at locations where the road tote road is constructed in to an embankment to prevent erosion	4 Person Day	10	$996	$ 9,960	Hours	60	$138	$ 8,251	$ 18,211				$ 18,211		$ -	15%	$ 2,732			Basis for 2011 - Assume installation of water bars at designated locations where the road is built in to the embankment and the combination of snow accumulation and road grade could cause water volume & velocity increasing the potential for erosion. Estimate 11 locations requiring 2 water bars each as described in Figure 8.11. Assume a two person crew with one excavator would take 5 days. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Remove all round culvert crossings and stabilize slopes.	6 Person Day	360	$996	$ 358,560	Hours	2880	$138	$ 396,058	$ 754,618				$ 754,618		$ -	20%	$ 150,924			Basis for 2011 - Remove all round culver installations Assume removal of fill back to the high water mark and regraded to the natural slope as described in Figure 8.10. Round culvert crossing s-built detail provided in Appendices B-4, B-5 and B-6). Assumes removal of all culverts in 60 days by a 6 person crew with blended equipment rate and 4 pieces of equipment operating continuously for 60 days. Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
General access Roads				**$ 14,940**				**$ 9,715**	**$ 24,655**	**$ -**	**$ 24,655**	**$ -**	**$ -**	**$ -**	$ -		**$ 3,698**			
Grade and contour road surfaces and remove culverts from access roads (Explosives, landfill, sewage lagoon and water intake access roads)	3 Person Day	15	$996	$ 14,940	Hours	88	$110	$ 9,715	$ 24,655		$ 24,655				$ -	15%	$ 3,698		Scope is well defined with supportding as built drawings and documentation. A 15% contingency is deemed appropriate to address productivity estimates.	Basis for 2011 - Remove all round culver installations Assume removal of fill back to the high water mark and regraded to the natural slope as described in the A&R Plan report technical spec. There are only 4 culverts, grading and berm construction Assume 15 man days labour. See the following references for scope (Figures 8.1, 8.10 and 8.11) and as-built detail (Appendices B-4, B-5 and B-6) See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Airstrips				**$ 11,683**				**$ 9,564**	**$ 21,247**	**$ -**	**$ 21,247**	**$ -**	**$ -**	**$ -**	$ -		**$ 2,125**			
Remove Mary River airstrip lighting (there is currently no lighting present at Milne Inlet)	3 Person Day	15	$513	$ 7,699	Hours	24	$100	$ 2,400	$ 10,099		$ 10,099				$ -	10%	$ 1,010		The airstrip lighting & cable system is surveyed and the scope for removal well understood. A moderate contingency has been applied.	Basis for 2011 - 2 days of excavator work & labor crew to remove cable, pulpits & lights. See the following references for scope (Figures 8.1 and 8.2) and as-built detail (Appendices B-1) See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .

Roads & Airstrips

Total Labour 2063.5

175808

		Labor				Equipment															
	Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
Fill in airstrip lighting ditches & regrade at Milne Inlet and Mary River 3	Person Day	4	$996	$ 3,984	Hours	48	$149	$ 7,164	$ 11,148		$ 11,148				$ -	10%	$ 1,115		The airstrip lighting & cable system is surveyed and the scope for removal well understood. A moderate contingency has been applied.	Basis for 2011 - 2 days of dozer to refill & grade. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .

Borrow/Quarry Areas

Total Labour 188

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Total					**$ 187,428**				**$ 283,334**	**$ 470,762**	**$ -**	**$ 45,000**	**$ 425,762**	**$ -**	**$ -**	$ -	22%	**$ 103,678**			
Geotechnical monitoring of permitted & road side borrow area reclamation	2	Person Day	45	$1,000	$ 45,000				$ -	$ 45,000		$ 45,000				$ -	10%	$ 4,500		Estimate based on Geotechnical assessment completed in 2009 - cost assessments is well understood. A moderate contingency has been applied.	Assume a geotechnical inspection in Year 2 to further develop post completion of EBA recommendations and in subsequent year to confirm feature stability.
Grade and contour primary borrow sites at Milne Inlet, Mary River, Midway and quarry	3	Person Day	60	$996	$ 59,760	Hours	720	$138	$ 99,014	$ 158,774			$ 158,774			$ -	15%	$ 23,816		A well defined technical scope completed to confirm estimate made for final reclamation of borrow and quarry areas. A conservative estimate has been made given partial reclamation. A contingency of 15% has been applied.	Geotechnical inspection and report defining criteria and scope for reclamation completed by EBA engineering in 2009. Areas requiring immediate attention were addressed in 2009. Three of the four permitted borrow areas have been partially reclaimed - The estimate has not included any partial reclamation activities. These only required dozer and grading. Estimate based on the scope of work developed in the EBA report. See the following references for scope (Appendix D) See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Grade and contour road side borrow areas within alignment	3	Person Day	83	$996	$ 82,668	Hours	996	$138	$ 136,970	$ 219,638			$ 219,638			$ -	30%	$ 65,891		A well defined technical scope completed to confirm estimate for final reclamation of road side borrow areas. Given the large number of road side borrows and the distance of the Milne Inlet Tote Road. A conservative contingency of 30% has been applied to cover potential shortfalls in equipment productivity.	
Borrow materials from permitted borrow areas (m3)	3						18,940	2.5	$ 47,350	$ 47,350			$ 47,350			$ -	20%	$ 9,470		Quantities are well understood as they are derived from surveyed volumes & as built drawings. A moderate contingency has been applied	See Appendix G-3, Estimate of A & R Borrow Area Material requirements Table for detailed estimate

Fuel Storage Facilities (Bulk and Drums) Total Labour 377 105.72

	Year	Labor Units	Person Days	Unit Rate	Cost	Equipment Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
GRAND TOTAL					**$ 346,444**				**$ 186,193**	**$ 532,637**	**$ -**	**$ 348,276**	**$ 184,360**	**$ -**	**$ -**	$ -	24%	**$ 127,577**			
Mary River Fuel Farm					**$ 65,171**				**$ 92,879**	**$ 158,050**	**$ -**	**$ 18,525**	**$ 139,525**	**$ -**	**$ -**	$ -		**$ 37,408**			
Return excess fuel at Mary River to Milne Inlet	2	Person Day	5	$996	$ 4,980	Hours	105	$129	$ 13,545	$ 18,525		$ 18,525				$ -	10%	$ 1,853		The scope of work is well defined and the hypothetical abandonment scenario occurs at time of maximum fuel inventory. Abandonment at almost any other time would have a lower inventory of fuel at Mary River. Hence a 10% contingency has been applied	Assume excess fuel returned occurs after Mary River had been restocked with bulk fuel. Current volume on Dec 31 = 881,000 liters. Fuel truck productivity well established based historical performance - 2 round trips/day between Mary River and Milne Inlet. 881,000 l to back haul. Haul hours = 881,000 l / 50,000 l/trip / 2 trips/shift * 12 hours/shift = 105 hours. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Drain, fold, and containerize Mary River bladder tanks	3	Person Day	9	$800	$ 7,200	Hours	36	$66	$ 2,380	$ 9,580			$ 9,580			$ -	10%	$ 958		Scope is well defined and manufacturer productivity based on same task completed in 2008 at Milne Inlet. A 10% contingency has been applied in the event of lower productivity.	11 bladders at Mary is one seventh the number at Milne. Assume cost is 1/7 Milne * Estimate from manufacturer: 7 man crew for 3 days (fold) = 21 man days + 3 man crew for 12 days (drain, remove pipe & package) =9 man days. Bob cat Equipment hours = 3 days* 12 hours = 36. Scope based on as-built (See Appendix G-4, 2011A&R Plan Estimating Docs\Fuel Storage Facilities\Mary River Bulk Fuel Farm as built Reports. . See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Remove all geomembrane fuel liners, package and transport to Milne Inlet for sea-lift backhaul	3	Person Day	10	$718	$ 7,175	Hours	60	$136	$ 8,187	$ 15,362			$ 15,362			$ -	10%	$ 1,536		All secondary containment has been surveyed. Productivities are based upon recent operating experience. A contingency of 10% is considered adequate.	Assume 4 days of dozer work to expose all the liner and package for shipping and 1 day to ship it to Milne Inlet by flat deck. Assume 5 labour days to prepare & package. Scope based on as built drawings (See Appendix B-1). See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Execute civil works to transport potential hydrocarbon contaminated soil form the Mary River bulk fuel farm to the Milne Inlet land farm	3	Person Day	21	$996	$ 20,916	Hours	252	$126	$ 31,835	$ 52,751			$ 52,751			$ -	30%	$ 15,825		Although the scope will not be confirmed until completion of the phase 1-3 environmental assessment and engineering design, a worse case scenario has been used for the estimate. A 30% contingency has been applied against the potential for additional civil work resulting from current uncertainty in scope.	Estimate of civil work requirements based on worse case scenario of entire fuel farm base above the liner requiring land farming and to be moved to a location 300 meters from water. Consultant preferred suitable location 1.5 km from fuel farm in permitted borrow area south of Milne Inlet. Assume Milne Inlet fuel farm base above liner = 96 m x 25m x 0.30m = 720 m3. Labour & equipment estimates = 720 cubes /27 cubes/truck W no pup = 27 Trips 27rips/2trips/day(1Mary River to Milne Inlet= 14 truck days @ 4 trucks hauling =3.5 days required for other equipment including 1 Dozers 1 loader = 6 pieces of equipment * 3.5 days = 21 person days. Scope based on as built drawings (See Appendix B-1). See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .

Fuel Storage Facilities (Bulk and Drums) Total Labour 377 105.72

	Year	Labor Units	Person Days	Unit Rate	Labor Cost	Equipment Units	Equip Hrs	Unit Rate	Equipment Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
Execute civil works to transport potential hydrocarbon contaminated soil from Mary River non-bulk fuel farm lined containment areas to the Milne Inlet land farm	3	Person Day	22	$996	$ 21,912	Hours	264	$126	$ 33,351	$ 55,263			$ 55,263			$ -	30%	$ 16,579		Although the scope will not be confirmed until completion of the phase 1-3 environmental assessment and engineering design, a worse case scenario has been used for the estimate. A 30% contingency has been applied against the potential for additional civil work resulting from current uncertainty in scope.	Estimate of civil work requirements based on worse case scenario of entire secondary containment base above liners to be moved to Milne Inlet land farm proposed for the bulk fuel farm. . Assume generic secondary containment berm volume above liner = 23m x 12m x 0.30m =82 m3. Labour & equipment estimates =82 cubes /27 cubes/truck W no pup = 6Trips 6 trips/2trips/day/truck(Round trip Mary River to Milne Inlet = 3days/berm. There are 5 lined berms at Mary River = 15 days with one truck hauling. @ 4 trucks hauling =3.75 days required for other equipment including 1 Dozers 1 loader = 6 pieces of equipment * 3.75 days = 22 person days. Scope based on as built drawings (See Appendix B-1). See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Recontour surface	3	Person Day	3	$996	$ 2,988	Hours	24	$149	$ 3,582	$ 6,570			$ 6,570			$ -	10%	$ 657		All secondary containment has been surveyed. Productivities are based upon recent operating experience. A contingency of 10% is considered adequate.	Assume e 3 dozer days recontour all lined berms. All lined berms are indicated on the MR as-built drawing. Scope based on as built drawings (See Appendix B-1). See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Milne Inlet Fuel Farm					**$ 281,273**				**$ 93,313**	**$ 374,586**	**$ -**	**$ 329,751**	**$ 44,835**	**$ -**	**$ -**	$ -		**$ 90,169**			
Milne Inlet fuel farm Oil Water Separation Operation	2	Person Day	180	$996	$ 179,280	Lot	1	$20,000	$ 20,000	$ 199,280		$ 199,280				$ -	30%	$ 59,784		The estimate is based upon Historical labour & material requirements for operation of the oil-water separation process. However, it is possible that technical support or that the volume requiring treatment may be under estimated. A contingency of 30% is included to cover these possibilities.	2011 estimate based on a single season of treatment prior to converting the fuel farm to a soil remediation land farm. Once converted to a land farm, no further treatment is required. Assume 45 days of operation of oil water separation/activated carbon prior to starting tilling of soil. Labour based on 2 person/shift operation for 45 days and consumables (absorbent material and activated carbon) of $20,000 season.
Milne Inlet Bulk Fuel Sealift Backhaul Support	2	Person Day	14	$800	$ 11,200	Hours	0	$0	$ -	$ 11,200		$ 11,200				$ -	15%	$ 1,680		Fuel transfer rate is well defined based on two previous bulk fuel transfers at Milne Inlet. Fuel inventory is projected based on budgeted consumptions. A contingency of 15% is applied in the event of below planned fuel consumption.	Assume Jan 1 2011 bulk fuel volume for the purpose of estimating = 2.89 MM liters. Fuel transfer rate = 60 cubes/hour. Total transfer time = 48 hours - Assume 3.5 days to transfer fuel from fuel farm to tanker to compensate for potential weather delays. Requires 2 persons/shift. . Baffinland bulk fuel transfer procedure for safely discharging attached (See Appendix G-4, 2011A&R Plan Estimating Docs\Fuel Storage Facilities\Milne Inlet Bulk Fuel Unloading Procedure. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .

Fuel Storage Facilities (Bulk and Drums) Total Labour 377 105.72

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Drain, fold, and containerize Milne bladder tanks	2	Person Day	57	$800	$ 45,600	Hours	144	$66	$ 9,518	$ 55,118		$ 55,118				$ -	10%	$ 5,512		Scope is well defined and manufacturer productivity based on same task completed in 2008 at Milne Inlet. A 10% contingency has been applied in the event of lower productivity.	Estimate from manufacturer: 7 man crew for 3 days (fold) = 21 man days + 3 man crew for 12 days (drain, remove pipe & package) = 36 man days. Equipment hours = 12 days* 12 hours = 143 hrs. Scope based on as-built (See Appendix G-4, 2011A&R Plan Estimating Docs\Fuel Storage Facilities\Milne Inlet Bulk Fuel Farm as Built drawings. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Remove Piping from fuel farm	2	Person Day	12	$439	$ 5,268	Hours	48	$91	$ 4,350	$ 9,618		$ 9,618				$ -	10%	$ 962		Scope is well defined and estimate if based on manufacturer quotation. A 10% contingency has been applied in the event of lower productivity.	2011 - Estimate from manufacturer: 3 man crew for 4 days to disassemble all piping. Requires a loader/skid steer for 48 hours. Scope based on as-built (See Appendix G-4, 2011A&R Plan Estimating Docs\Fuel Storage Facilities\Milne Inlet Bulk Fuel Farm as Built drawings. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Remove all hazardous material/fuel storage geomembrane fuel liners and package for sea-lift backhaul. (All lined berms except Milne Inlet Fuel Farm)	3	Person Day	10	$606	$ 6,061	Hours	36	$149	$ 5,373	$ 11,434			$ 11,434			$ -	10%	$ 1,143		All secondary containment has been surveyed. Productivities are based upon recent operating experience. A contingency of 10% is considered adequate.	Assume 3 days of dozer work to expose all four of the hazardous material lined berms and 3 days x 2 person labour to package for shipping. All lined berms are indicated on the MI as-built drawing. Scope based on as-built (See Appendix G-4, \2011A&R Plan Estimating Docs\Fuel Storage Facilities\General design drawing for all lined earthed berms used for secondary containment. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Execute civil works to convert the fuel farm to hydrocarbon impacted soil land farm	3	Person Day	21	$996	$ 20,916	Hours	252	$133	$ 33,619	$ 54,535		$ 54,535				$ -	30%	$ 16,361		Although the scope will not be confirmed until completion of the phase 1-3 environmental assessment and engineering design, a worse case scenario has been used for the estimate. A 30% contingency has been applied against the potential for additional civil work resulting from current uncertainty in scope.	Estimate of civil work requirements based on worse case scenario of entire fuel farm base above the liner requiring land farming and to be moved to a location 300 meters from water. Consultant preferred suitable location 1.5 km from fuel farm in permitted borrow area south of Milne Inlet. Assume Milne Inlet fuel farm base above liner = 250 m x 50m x 0.30m = 3500 m3. Labour & equipment estimates = 3500 cubes /27 cubes/truck W no pup = 110 Trips 110 trips/20trips/day(10 hr@30 min/trip)== 7 truck days @ 4 trucks hauling =3 days required for other equipment including 2 Dozers 1 loader = 7 pieces of equipment * 3 days = 21 person days.

Fuel Storage Facilities (Bulk and Drums) Total Labour 377 105.72

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Execute civil works to transport potential hydrocarbon contaminated soil from Milne Inlet non-bulk fuel farm lined containment areas	3	Person Day	3	$996	$ 2,988	Hours	36	$110	$ 3,950	$ 6,938			$ 6,938			$ -	30%	$ 2,082		Although the scope will not be confirmed until completion of the phase 1-3 environmental assessment and engineering design, a worse case scenario has been used for the estimate. A 30% contingency has been applied against the potential for additional civil work resulting from current uncertainty in scope.	Estimate of civil work requirements based on worse case scenario of entire secondary containment base above liners to be moved to land farm proposed for the bulk fuel farm. Consultant preferred suitable location 1.5 km from fuel farm in permitted borrow area south of Milne Inlet. Assume generic secondary containment berm volume above liner = 23m x 12m x 0.30m =82 m3. Labour & equipment estimates =82 cubes /27 cubes/truck W no pup = 6Trips 6 trips/20trips/day/truck(10 hr@30 min/trip)== 0.3days/berm. There are 5 lined berms at Milne = 2.0 days with one truck hauling. To make the process efficient, assume 1 day with two trucks and an operator for the dozer and one for the loader operation support = 3 man days. Scope based on as-built (See Appendix B-2 and Appendix G-4, 2011A&R Plan Estimating Docs\Fuel Storage Facilities\Milne Inlet Bulk Fuel Farm as Built drawings. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table .
Recontour surface	3	Person Day	10	$996	$ 9,960	Hours	120	$138	$ 16,502	$ 26,462			$ 26,462			$ -	10%	$ 2,646		Scope is well defined and Productivities are based upon recent operating experience. A contingency of 10% is applied in the event additional hours are required to complete the work	Assume entire Milne Inlet fuel farm base and berm walls to be leveled and contoured . Scope based on as-built (See Appendix B-2 and Appendix G-4, 2011A&R Plan Estimating Docs\Fuel Storage Facilities\Milne Inlet Bulk Fuel Farm as Built drawings. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table

Explosives

Total Labour 0

	Year	Labor				Equipment															
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
Total					$ -				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	#DIV/0!	$ -			
Prepare explosives for shipping		Person Day			$ -	Hours			$ -	$ -	$ -					$ -	0%	$ -			All explosives, cord and detonators were destroyed in August, 2010. No outstanding decommissioning liabilities currently exist with regard to explosives. Zero cost has been applied in 2011. Task maintained for 1 year after work is no longer required
Ship explosives to Milne Inlet		Person Day			$ -				$ -	$ -					$ -	$ -	0%				
Ship explosives via land to Milne Inlet		Person Day			$ -	Hours			$ -	$ -	$ -					$ -	0%	$ -			

Waste Management

Total Labour 142

	Year	Labor				Equipment															
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
GRAND TOTAL					**$ 137,214**				**$ 431,455**	**$ 568,669**	**$ -**	**$ 213,142**	**$ 355,527**	**$ -**	**$ -**	$ -	19%	**$ 110,145**			
Operate Landfill					**$ 111,552**				**$ 184,827**	**$ 296,379**	$ -	$ -	**$ 296,379**	$ -	$ -	$ -		**$ 57,159**			
Construct Access Road to Landfill including haulage		Person Day	0	$0	$ -	Hours	0	$0	$ -	$ -	$ -					$ -	0%	$ -			Access road to landfill was constructed in 2010 and as built drawings and report completed. This task is no longer required.
Expand Landfill Berms including haulage	3	Person Day	32	$996	$ 31,872	Hours	384	$138	$ 52,808	$ 84,680			$ 84,680			$ -	30%	$ 25,404		Scope is well defined and design drawings completed. Equipment estimates based on historical productivity. A 15 % contingency has been applied against the potential reduced civil work productivity.	2011 basis same as 2009 - 9216 cubes /32.52 cubes/truck W no pup = 283Trips. 283 trips/16 trips/day(11 hr@40 min/trip)== 17 truck days @ 4 trucks hauling =5 days required for other equipment including Dozer, loader, excavator = 15 equipment days. Scope based on landfill design and as-built (See Appendix B-7 and Appendix G-4, \2011A&R Plan Estimating Docs\Waste Mngmt\Mary River Landfill As built Report. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Borrow Haulage required for operation of land fill to capacity	3	Person Day	27	$996	$ 26,892	Hours	324	$138	$ 44,556	$ 71,448			$ 71,448			$ -	15%	$ 10,717		Scope is well defined and design drawings completed. Equipment estimates based on historical productivity. A 15 % contingency has been applied against the potential reduced civil work productivity.	2011 basis same as 2009 - 8668 cubes /32.52 cubes/truck W no pup =555Trips. 555 trips/16 trips/day(11 hr@40 min/trip)== 34 truck days @ 4 trucks hauling =9 days required for other equipment including Dozer, loader = 19 equipment days Scope based on landfill design and as-built (See Appendix B-7 and Appendix G-4, \2011A&R Plan Estimating Docs\Waste Mngmt\Mary River Landfill As built Report. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Borrow Haulage required for capping landfill	3	Person Day	53	$996	$ 52,788	Hours	636	$138	$ 87,463	$ 140,251			$ 140,251			$ -	15%	$ 21,038		Scope is well defined and design drawings completed. Equipment estimates based on historical productivity. A 15 % contingency has been applied against the potential reduced civil work productivity.	2012 basis same as 2009 - 18060 cubes /32.52 cubes/truck W no pup = 283 trips. 283 trips/16 trips/day(11 hr@40 min/trip) = 17 truck days @ 4 trucks hauling =5 days required for other equipment including Dozer, loader, excavator = 15 equipment days Scope based on landfill design and as-built (See Appendix B-7 and Appendix G-4, \2011A&R Plan Estimating Docs\Waste Mngmt\Mary River Landfill As built Report. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Ship waste by land Mary River to Milne Inlet					**$ 5,334**				**$ 31,698**	**$ 37,032**	$ -	$ -	**$ 37,032**	$ -	$ -	$ -		**$ 7,406**			
Prepare chemicals for shipping	3	Person Day	9	$593	$ 5,334	Hours	3	$66	$ 198	$ 5,532			$ 5,532			$ -	20%	$ 1,106		The scope is well defined - All of the historical waste has been demobilized and individual waste type production has been estimated from recent site generation rates. The preparation estimate rates is based on 2010 contractor invoiced rates & productivity . A 20% contingency has been applied to cover potential excess hazardous waste generation upon completion of A & R plan.	Scope based on volume estimates contained Appendix G-3, 2011 Mary River Project A & R Plan Material Balance table and 2011 - Hazardous and Non-Hazardous Material requiring disposal Inventory = 76 m3 estimate. Packaging of 76m3, based 2009 productivity require 3 days of QE representation and 2 labourers with the use of a skid steer for 12 hours/day. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Disposal cost of hazardous material in the South (except bulk contaminated soil)	3	Person Day		$0	$ -	Cube	76	$414	$ 31,500	$ 31,500			$ 31,500			$ -	20%	$ 6,300		The scope is well defined - All of the historical waste has been demobilized and individual waste type production has been estimated from recent site generation rates. Disposal estimates are based on 2009 invoiced rates. A 20% contingency has been applied to cover potential excess hazardous waste disposal that would occur upon completion of a final A & R plan.	Scope based on volume estimates contained Appendix G-3, 2011 Mary River Project A & R Plan Material Balance table and 2011 - Hazardous and Non-Hazardous Material requiring disposal Inventory = 76 m3 estimate. Average disposal cost based on 2010 blended hazardous material weighted cost - See Appendix G-3, Hazardous Material Disposal Cost in the South Packaging which was used to calculate disposal cost in the south= $414 $/m3. 3rd party vendor quote supporting Units costs from 2010 are in Appendix G-4, 2011A&R Plan Estimating Docs\Waste Mngmt\QE 2010 proposal disposal rates for hazardous material. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Sewage - Mary River					**$ 13,944**				**$ 208,917**	**$ 222,861**	$ -	**$ 213,142**	**$ 9,720**	$ -	$ -	$ -		**$ 43,600**			
Decant sewage lagoons	2	Person Day	0	$0	$ -	Lot	1	$192,504	$ 192,504	$ 192,504		$ 192,504				$ -	20%	$ 38,501		The technical treatment process of lagoon sewage was confirmed and executed in 2009. The operating and maintenance unit cost are well defined based on invoiced cost. The quantity of sewage requiring treatment is based on surveyed inventory and estimated production based on budgeted person days through to planned execution date for A & R. A 20% estimate has been applied to cover potential increase in person days and the resulting increase in sewage.	Basis for 2011 estimate based on actual 2009 invoiced unit treatment costs, surveyed sewage inventory post 2009 treatment. No treatment in 2010. Scope based Mary River sewage lagoon engineered treatment process design. Operations manuals been included. No additional basic engineering required to develop a treatment process. See Appendix G-4, 2011A&R Plan Estimating Docs\Waste Mngmt\Mary Rives Sewage Lagoon Treatment Process Design.

Waste Management

Total Labour 142

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Sludge removal & transfer to landfill	2	Person Day	10	$996	$ 9,960	Hours	6	$113	$ 10,678	$ 20,638		$ 20,638				$ -	20%	$ 4,128		The estimate is based upon well defined sewage and sludge quantities and treatment and disposal process are technically well understood. A 20% estimate has been applied to cover potential increase in person days and the resulting increase in sewage.	Basis for 2011 estimate based on use of geotube technology in year 2. Allowance made for pumping Sludge through geotube and letting tube free drain on lagoon berm wall. Year involves transport to landfill for permanent disposal. Process approved my Province of Ontario for treatment of sewage sludge. Sludge estimate based on current measured solids of 0.5% and projected A & R sewage inventory of 6520 m3 = 32.6 m3 solids. This is equivalent to 2 Kenworth truck load to the landfill - Assume half day An allowance of $10,000 has been made for the geotube filter & 10 days labour to pump our the 32 cubes of solids.pumping. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Liner removal & berm reclamation	3	Person Day	3	$996	$ 2,988	Hours	36	$130	$ 4,674	$ 7,662			$ 7,662			$ -	10%	$ 766		All civil work requiring the lagoon fill for A & R is estimated in those tasks. Final grading & contouring civil work is minor. Assume a 10% contingency.	Assume berm fill is used in reclamation projects and haulage estimates are included in those tasks. Labour & equipment is for liner removal and final grading and contouring of areas with a dozer & grader. See Figure 8.2 for reclamation detail and Appendix B-1 and Appendix G-4, 2011A&R Plan Estimating Docs\Waste Mngmt\Mary River Sewage Lagoons design and asbuilts for berm design and as-built used to determine scope. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Liner disposal	3	Person Day	1	$996	$ 996	Hours	12	$88	$ 1,062	$ 2,058			$ 2,058			$ -	10%	$ 206		Scope is well defined and Labour & Equipment productivity well established. A 10% contingency is deemed adequate.	Assume 2 persons for half a day with skid steer and flat deck for transporting liner for disposal in landfill. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Sewage - Milne					**$ 6,384**				**$ 6,013**	**$ 12,397**	$ -	$ -	**$ 12,397**	$ -	$ -	$ -		**$ 1,979**			3
Decant sewage lagoons	3	Person Day	3	$800	$ 2,400	Hours	0	$0	$ -	$ 2,400			$ 2,400			$ -	20%	$ 480		The technical treatment process of lagoon sewage was confirmed and executed in 2009. The operating and maintenance unit cost are well defined based on invoiced cost. The quantity of sewage requiring treatment is based on surveyed inventory and estimated production based on budgeted person days through to planned execution date for A & R. A 20% estimate has been applied to cover potential increase in person days and the resulting increase in sewage.	Basis for 2011 Estimate - Sewage Lagoon current in compliance with discharge criteria and was partially discharged in 2009. Remaining sewage inventory of 114m3. At a discharge rate of 30 l/m, 3 days is required to decant the treated sewage. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Sludge removal & transfer to landfill	3	Person Day	1	$996	$ 996	Hours	12	$138	$ 1,650	$ 2,646			$ 2,646			$ -	15%	$ 397		The estimate is based upon well defined sewage and sludge quantities and treatment and disposal process are technically well understood. A 15% has been applied to cover potential short fall in equipment productivity.	Sludge removal from MI Lagoon(Assume filtering of sludge added to task of decanting the sewage lagoons) Assume natural decantation followed by loader/truck removal to landfill . Based on 0.5% solids, it is expected less that 1 truck load sludge required for disposal to landfill. The one time cost of the sludge filter was included in the Mary River sludge removal cost. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Liner removal & berm reclamation	3	Person Day	2	$996	$ 1,992	Hours	24	$138	$ 3,300	$ 5,292			$ 5,292			$ -	15%	$ 794		All civil work requiring the lagoon fill for A & R is estimated in those tasks. Final grading & contouring civil work is minor. Assume a 15% contingency.	Basis for 2011- Assume berm fill is used in reclamation projects and haulage estimates are included in those tasks. Labour & equipment is for liner removal and final grading and contouring of areas with a dozer & grader. Scope based on Figure 8.4 and Appendix G-4, Baffinland\2011A&R Plan Estimating Docs\Waste Mngmt\Milne Inlet Sewage lagoon as built survey\Milne Inlet 100_06_01_sewage lagoon as built .dwg. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Liner disposal	3	Person Day	1	$996	$ 996	Hours	12	$88	$ 1,062	$ 2,058			$ 2,058			$ -	15%	$ 309		Scope is well defined and Labour & Equipment productivity well established. A 15% contingency has been applied to cover potential shortfall in equipment productivity.	Assume 2 persons for half a day with skid steer and flat deck for transporting liner for disposal in landfill. Based on current truck haulage productivity between Milne Inlet and Mary River. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table

Hydrocarbon Impacted Soil

Total Labour 580

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Total					**$ 707,266**				**$ 465,416**	**$ 1,172,682**	**$ 69,913**	**$ -**	**$ -**	**$ 495,554**	**$ 607,216**	$ -	15%	**$ 176,491**			
Complete phase 1 to phase 3 environmental assessment to identify hydrocarbon contaminated soil and to develop soil remediation criteria and land farm design	2	Lot	1	$69,913	$ 69,913	Hours	0		$ -	$ 69,913	$ 69,913					$ -	30%	$ 20,974		Estimate based on maximum upset price. However, proposal and quote was provided in 2009. A 30% contingency has applied to cover inflation as the quote is 2 years old and to cover additional potential assessment requirements.	Estimate based on EBA engineering proposal develop criteria, complete phase I to phase III assessment & land farm design proposal (See Appendix G-4, 2011A&R Plan Estimating Docs\Hydrocarbon Imp Soil\EBA Phase I-3 EA and land farm design) with maximum upset price of $70K.
Land farm Operation Yr 3			**140**		**$ 158,600**				**$ 95,177**	**$ 253,777**	**$ -**	**$ -**	**$ -**	**$ 247,777**	**$ 6,000**	$ -		**$ 37,167**			
Milne Inlet - Till hydrocarbon impacted soil - Land farm operation	3	Person Day	140	$1,090	$ 152,600	Hours	720	$132	$ 95,177	$ 247,777				$ 247,777		$ -	15%	$ 37,167		Land farming technology for treating hydrocarbon impacted soil in the arctic is proven and the techniques and scope well established. A full 12 hours/day equipment use has been applied to cost estimate which is a very conservative estimate. A general 15% Contingency has been applied to cover undefined detailed scope.	Conversion for fuel farm to land farm estimated in 'fuel storage facilities' worksheet. Year 4 basis assumes mechanic and operator execute the work required to till the hydrocarbon impacted soil work. Assume practical length of tilling season is June 15-Aug 31st or 10 weeks . Engineering design to determine detailed tilling execution strategy. Assume labour & equipment resourced at site for entire operational period. Cost out 2 persons on site for 10 weeks per year for 3 years) . Task will require a dozer & loader. Convention land farming has material tilled once/wee. Assume a third party contractor loader & dozer required for 36 hours /week to complete tilling of land farm . Blended Labour and equipment rates applied. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
food & accommodations	3	Person Day								$ -					$ -	$ -		$ -			Year 3 cost for food and accommodations included in general "camp operation" worksheet
Year 4-6 commercial flights for labour	3	Person Day				Person Flights				$ -					$ -	$ -		$ -			Year 3 cost for commercial flights included in "camp operation" worksheet
Fixed wing support (note: equip hrs refer to statute miles)	3	Person Day				statute miles				$ -					$ -	$ -		$ -			Year 3 cost for fixed wing support included in "camp operation" worksheet
Third Party Consultant to monitor and support land farm operations	3	Person Day	6	$1,000	$ 6,000	hours			$ -	$ 6,000					$ 6,000	$ -		$ -			2011 estimate based on typical day rate for third party engineering consultant. Assume 2 day visits each year. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table

General Site Area

Total Labour 1500

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Total					**$ 1,562,040**				**$ -**	**$ 1,562,040**	$ -	**$ 1,487,040**	$ -	$ -	**$ 75,000**	$ -	10%	**$ 156,204**			
Project Management & Supervision Year 2					**$ 480,680**				**$ -**	**$ 480,680**	$ -	**$ 455,680**	$ -	$ -	**$ 25,000**	$ -		**$ 48,068**			
Third party Contractor - Admin & supervisory staff	2	Person days	300	1202	$ 360,680	Hours			$ -	$ 360,680		$ 335,680			$ 25,000	$ -	10%	$ 36,068		This level of project management and third party staff levels is considered adequate for the execution of this A&R plan scope and a contingency of 10% is sufficient.	Basis for 2011 Estimate assumes third party contractor requires the following three staff management roles - one site superintendent and one supervisor from May 1 to Sept. 30th. A blended rate reflecting the average of the three roles has been used. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Project Management Supervision	2	Person days	150	800	$ 120,000	Hours			$ -	$ 120,000		$ 120,000				$ -	10%	$ 12,000			Basis for 2011 Estimate assumes project management/engineering/technical support of 1 staff at site through the execution of the A&R plan from May 1 to Sept 30th. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Project Management & Supervision Year 3					**$ 600,680**				**$ -**	**$ 600,680**	$ -	**$ 575,680**	$ -	$ -	**$ 25,000**	$ -		**$ 60,068**			
Third party Contractor - Admin & supervisory staff	3	Person days	300	1202	$ 360,680	Hours			$ -	$ 360,680		$ 335,680			$ 25,000	$ -	10%	$ 36,068		This level of project management and third party staff levels is considered adequate for the execution of this A&R plan scope and a contingency of 10% is sufficient.	Basis for 2011 Estimate assumes third party contractor requires the following three staff management roles - one site superintendent and one supervisor from May 1 to Sept. 30th. A blended rate reflecting the average of the three roles has been used. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Project Management Supervision	3	Person days	300	800	$ 240,000	Hours			$ -	$ 240,000		$ 240,000				$ -	10%	$ 24,000			Basis for 2011 Estimate assumes project management/engineering/technical support of 2staff at site through the execution of the A&R plan from May 1 to Sept 30th. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Project Management & Supervision Year 4					**$ 480,680**				**$ -**	**$ 480,680**	$ -	**$ 455,680**	$ -	$ -	**$ 25,000**	$ -		**$ 48,068**			
Third party Contractor - Admin & supervisory staff	4	Person days	300	1202	$ 360,680	Hours			$ -	$ 360,680		$ 335,680			$ 25,000	$ -	10%	$ 36,068		This level of project management and third party staff levels is considered adequate for the execution of this A&R plan scope and a contingency of 10% is sufficient.	Basis for 2011 Estimate assumes third party contractor requires the following three staff management roles - one site superintendent and one supervisor from May 1 to Sept. 30th. A blended rate reflecting the average of the three roles has been used. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Project Management Supervision	4	Person days	150	800	$ 120,000	Hours			$ -	$ 120,000		$ 120,000				$ -	10%	$ 12,000			Basis for 2011 Estimate assumes project management/engineering/technical support of 1 staff at site through the execution of the A&R plan from May 1 to Sept 30th. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table

Sealift Materials

Total Labour 36

	Year	Labor				Equipment														
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost	Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
GRAND TOTAL					**$ 35,088**				**$ 4,318,780**	**$ 4,353,868**	**$ -**	**$ 3,082,161**	**$ 575,686**	**$ 629,951**	**$ 66,070**	$ -	10%	**$ 446,597**			
Freight Sealift Milne Inlet to Montreal Year 2	**2**				**$ 11,952**				**$ 2,834,009**	**$ 2,845,961**	**$ -**	**$ 2,845,961**	**$ -**	**$ -**	**$ -**	$ -		**$ 284,596**			
Shipment, loading and off loading		Person Day	12	$996	$ 11,952	Hours	144	$115	$ 16,579	$ 28,531		$ 28,531				$ -	10%	$ 2,853		Ship loading times are based on historical Milne Inlet ship loading times. A 10% contingency has been applied in the event of weather delays.	Basis for 2010 same as 2009 - Loading from beach to ship & ship to dock included in vessel cost. 6 days to load ship. Support provided by Nuna 1 operator two shifts/day to feed the beach with loader support. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Land freight for 3rd party A&R contractor equipment and supplies from mobilization location to port in Montreal (Year 2)	2					Cubic meters	4569	$38	$ 173,622	$ 173,622		$ 173,622					10%	$ 17,362		10 % contingency is appropriate given the mobilization point is likely to be closer than Edmonton, Alberta to the Port of Valleyfield , thus the land freight estimate is at the high end of potential land freight unit cost.	Unknown mobilization area for third part contractor. Assume lowest bidder will be located closer to Valleyfield than Edmonton, Alberta. Apply the $38/cubes quoted price obtained for hauling heavy equipment to Edmonton as a maximum upset price. 3rd party equipment volume required for execution of the A&R plan estimated at 4569 cubes. Estimate based on list or 3rd part equipment and material and calculated volumes(See Appendix G-4, 2011A&R Plan Estimating Docs\Sealift\Estimate of 3rd party list of equipment required for A&R.)
Dedicated Charter Freight Sealift of 3rd party contractor equipment and supplies to Milne Inlet, and to demobilize contractor equipment currently located at MR and MI,	2					Rev. Tonnes	2492	$305	$ 760,060	$ 760,060		$ 760,060					10%	$ 76,006		10% Contingency established to cover potential rate increase resulting from increase in Bunker C ship fuel and higher than predicted volume	Estimate based on Estimate based on list or 3rd party equipment and material required and corresponding calculated volumes(See Appendix G-4, 2011A&R Plan Estimating Docs\Sealift\Estimate of 3rd party list of equipment required for A&R.) and all the fuel for the execution of the A&R plan to be sealift in, in year 2 = 6230 cubes * 0.4 = 2492 Revenue Tonnes. (See Appendix G-3, Mary River and Milne Inlet - Sealift volumes (m3)) & rates include provided by sealift vendor quote of $305/Rev Tonne. (See Appendix G-3, 011A&R Plan Estimating Docs\Sealift\2011 Sealift Vendor Quotes\2011 Milne Inlet Sealift Quotes.
Demobilize by sealift site contractor and specified BIM equipment currently located at MR and MI,	2					Rev. Tonnes	6455	$198	$ 1,278,090	$ 1,278,090		$ 1,278,090					10%	$ 127,809		10% Contingency established to cover potential rate increase resulting from increase in Bunker C ship fuel and higher than predicted volume	See detailed sealift backhaul volume for Year 2 in Appendix G-3, Mary River and Milne Inlet - Sealift volumes (m3). = 16139 cubes * 0.4 = 6455 Revenue Tonnes @ NEAS quoted backhaul rate of $198/Rev Tonne. (See Appendix G-3, 011A&R Plan Estimating Docs\Sealift\2011 Sealift Vendor Quotes\2011 Milne Inlet Sealift Quotes.)
Land freight for site contractor and BIM owned equipment currently located at MR and Milne Inlet	2					Cubic meters	16040	$38	$ 605,658	$ 605,658		$ 605,658					10%	$ 60,566		10% contingency is appropriate to cover volume estimating error	Land freight based on quotes provide for hauling Nuna heavy equipment backhaul to Edmonton, Alberta. This is a longer haul than all other contractor delivery sites. (Boart Longyear - Hailebury, Ontario and Powder magazines, Montreal Que. Assume the $38/cubes quote is applied to the entire volume of contractor owned freight = Nuna (1772), Boart (199) & Dyno Nobel (800) Baffinland (3269). See Appendix G-4, 2011A&R Plan Estimating Docs\Sealift\Land freight backhaul quotes
Freight Sealift Milne Inlet to Montreal Year 3	**3**				**$ -**				**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	$ -		**$ -**			
Dedicated Charter Freight Sealift for supply of year 4 material & supplies, and for the backhaul of MI Tote Road Culverts and remaining material and 3rd party contractor equipment from M	3																				No freight sealift schedule for Year 3
Freight Sealift Milne Inlet to Montreal Year 4	**4**				**$ 11,952**				**$ 617,999**	**$ 629,951**	**$ -**	**$ -**	**$ -**	**$ 629,951**	**$ -**	$ -		**$ 62,995**			
Shipment, loading and off loading	4	Person Day	12	$996	$ 11,952	Hours	144	$165	$ 23,795	$ 35,747				$ 35,747		$ -	10%	$ 3,575		Ship loading times are based on historical Milne Inlet ship loading times. A 10% contingency has been applied in the event of weather delays.	Basis for 2011 - Loading from beach to ship & ship to dock included in vessel cost. 6 days to load ship. Support provided by 3rd party contractor 1 operator two shifts/day to feed the beach with loader support. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Land freight for material & supplies from mobilization location to Port of Valleyfield	4								$ -	$ -				$ -							No mobilization sealift planned in Year 4. All material accounted for in Year 2 Estimate. No allowance made for land freight
Dedicated Charter Freight Sealift for supply of year 5 & 6 material & supplies.	4								$ -	$ -				$ -							No mobilization sealift planned in Year 4. All material accounted for in Year 2 Estimate

Sealift Materials

Total Labour 36

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Demobilize decommissioned material and 3rd party contractor equipment from MI	4					Revenue tones	2028	$198	$ 401,544	$ 401,544				$ 401,544			10%	$ 40,154		10% Contingency established to cover potential rate increase resulting from increase in Bunker C ship fuel and higher than predicted volume	See detailed sealift volume in worksheet estimating Volume of Year 4 backhaul in Appendix G-3, Mary River and Milne Inlet - Sealift volumes (m3). = 5070 cubes * 0.4 = 2028 Revenue Tonnes @ NEAS quoted backhaul rate of $198/Rev Tonne. (See Appendix G-3, 011A&R Plan Estimating Docs\Sealift\2011 Sealift Vendor Quotes\2011 Milne Inlet Sealift Quotes.)
Land freight for decommissioned material and equipment from Port of Valleyfield	4					Cubes	5070	$38	$ 192,660	$ 192,660				$ 192,660			10%	$ 19,266		10% Contingency established to cover potential rate increase from higher than predicted volume	Land freight based on quotes provide for hauling Nuna heavy equipment backhaul to Edmonton, Alberta. The exact demob location is not known. Assume a land freight rate at the high end of the scale. 5070 cubes backhauled at $38/cubes. Volume calculated in Appendix G-3, Mary River and Milne Inlet - Sealift volumes (m3). Land freight rate provided by vendor quote(See Appendix G-4, 2011A&R Plan Estimating Docs\Sealift\Land freight backhaul quotes)
Bulk Fuel Demobilization Sealift - Milne Inlet Year 2	**2**				**$ 7,200**				**$ 229,000**	**$ 236,200**	**$ -**	**$ 236,200**	**$ -**	**$ -**	**$ -**	$ -		**$ 34,830**			
Dedicated charter - Bulk Fuel Tanker to backhaul bulk fuel to refinery for disposal	2	Person Day	12	$600	$ 7,200	Sailing	1	$229,000	$ 229,000	$ 236,200		$ 236,200				$ -	15%	$ 34,830		Estimate contains significant allowances due to the method used for the basis of the estimate. An additional 15% contingency has been applied	Estimate based on 1 bulk fuel for demobilization charter of Jan 31, 2001 bulk fuel inventor or 2.89 million liters of bulk fuel (See Appendix G-4, \2011A&R Plan Estimating Docs\Camp Ops\2011 A&R Plan forecast Fuel Requirements and assumptions). Direct quote not available from Woodward's. Estimate based on Government of Nunavut sealift freight cost of shipping fuel to Pond Inlet of $0.07/liter. Backhaul sealift cost expected to be <50% of the cost hauling North. However, for purpose of estimate and smaller volume assume 140% of full cost for backhaul or $0.10/liter. Discussions with Eastern Seaborne refineries indicates they will take all fuel providing a minimum credit of 80% of the value of the fuel - this has not been included into he cost. Assume an additional $10,000 demurrage. Day for loading. 2011 freight cost = $0.10*2,890,000 liters+ 3 day demurrage ($30,000)
Salvage of Baffinland owned fuel	2																				No allowance made for salvage value
Demobilize Freight Sealift Steensby Port to Port of Valleyfield - Year 3	**3**				**$ -**				**$ 575,686**	**$ 575,686**	**$ -**	**$ -**	**$ 575,686**	**$ -**	**$ -**	$ -		**$ 57,569**			
Shipment, loading and off loading	3	Person Day	0	$600	$ -	Hours	0		$ -	$ -		$ -				$ -	0%	$ -			This task is already costed in the "camp & related facilities" demobilization of Steensby
Vessel Costs Steensby - 1 freight backhaul sealift in Year 3	3	Person Day		$0	$ -	Rev Tonne	1965	$198	$ 389,030	$ 389,030			$ 389,030			$ -	10%	$ 38,903		10% Contingency established to cover potential rate increase resulting from increase in Bunker C ship fuel and higher than predicted volume	See detailed sealift backhaul volume for Year 3 Steensby backhaul sealift in Appendix G-3, Mary River and Milne Inlet - Sealift volumes (m3). = 4912 cubes / 2.5 = 1966 Revenue Tonnes. Rate is based Sealift vendor quote =$198/rev Tonne. . (See Appendix G-3, 011A&R Plan Estimating Docs\Sealift\2011 Sealift Vendor Quotes\2011 Steensby Inlet Sealift Quotes.)
Land Freight	**3**					Cubes	4912	$ 38	$ 186,656	$ 186,656			$ 186,656			$ -	10%	$ 18,666		Volumes are based upon detailed material balance estimates. The majority of large pieces have quotes for land freight shipping and a unit cost developed from 2009 invoices have been applied to the remainder of the freight. . Accordingly, Baffinland considers a 10% contingency for excess volume to be appropriate.	Land freight based on quotes provide for hauling Nuna heavy equipment backhaul to Edmonton, Alberta. The exact demob location is not known. Assume a land freight rate at the high end of the scale. 4912 cubes backhauled at $38/cubes . Volume calculated in Appendix G-3, Mary River and Milne Inlet - Sealift volumes (m3). Land freight rate provided by vendor quote(See Appendix G-4, 2011A&R Plan Estimating Docs\Sealift\Land freight backhaul quotes)
Freight Sealift Milne Inlet to Port of Valleyfield Year 6					**$ 3,984**				**$ 62,086**	**$ 66,070**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 66,070**	$ -		**$ 6,607**			

Sealift Materials

Total Labour 36

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Shipment, loading and off loading	6	Person Day	4	$996	$ 3,984	Hours	30	$115	$ 3,454	$ 7,438					$ 7,438	$ -	10%	$ 744		Ship loading times are based on historical Milne Inlet ship loading times. A 10% contingency has been applied in the event of weather delays.	Basis for 2011 - Loading from beach to ship & ship to dock included in vessel cost. 2 days to load ship. Support provided by 3rd party contractor 1 operator two shifts/day to feed the beach with loader support. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Vessel & stevedoring costs for backhaul of land farm timer, tilling equipment (i.e. loader with tiller drag), accommodation trailer and residual Milne Inlet camp & support supplies and equipment. Milne Inlet to Port of Valleyfield	6	Person Day			$ -	Rev Tonne	198	$185	$ 36,630	$ 36,630					$ 36,630	$ -	10%	$ 3,663		10% Contingency established to cover potential rate increase resulting from increase in Bunker C ship fuel and higher than predicted volume	See detailed sealift volume in worksheet estimating Volume of Year 6 backhaul in Appendix G-3, Mary River and Milne Inlet - Sealift volumes (m3). = 579 cubes * 0.4 = 232 Revenue Tonnes @ NEAS quoted backhaul rate of $198/Rev Tonne. (See Appendix G-3, 011A&R Plan Estimating Docs\Sealift\2011 Sealift Vendor Quotes\2011 Milne Inlet Sealift Quotes.)
Land freight cost for Year 6 backhaul sealift	6	Person Day			$ -	Cubic meters	579	$38	$ 22,002	$ 22,002					$ 22,002	$ -	10%	$ 2,200		Volumes are based upon detailed material balance estimates. The majority of large pieces have quotes for land freight shipping and a unit cost developed from 2009 invoices have been applied to the remainder of the freight. . Accordingly, Baffinland considers a 10% contingency for excess volume to be appropriate.	Land freight based on quotes provide for hauling Nuna heavy equipment backhaul to Edmonton, Alberta. The exact demob location is not known. Assume a land freight rate at the high end of the scale. 579 cubes backhauled at $38/cubes Volume calculated in Appendix G-3, Mary River and Milne Inlet - Sealift volumes (m3). Land freight rate provided by vendor quote(See Appendix G-4, 2011A&R Plan Estimating Docs\Sealift\Land freight backhaul quotes)

Camp Operations

Total Labour 1027

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
GRAND TOTAL					**$ 1,403,486**				**$ 5,627,091**	**$ 7,030,577**	**$ -**	**$ 4,866,753**	**$ 2,163,824**	**$ -**	**$ -**	$ -	12%	**$ 866,236**			
A&R Fuel Purchase	**2**				**$ -**				**$ 2,900,091**	**$ 2,900,091**	**$ -**	**$ 2,900,091**	**$ -**	**$ -**	**$ -**			**$ 375,358**			
Cash cost of fuel & barrel deposit	2				$ -	Lot	1	$1,535,691	$ 1,535,691	$ 1,535,691		$ 1,535,691					20%	$ 307,138		Although a detailed fuel balance was completed for the execution of the entire 6 year A&R plan, a large 20% contingency has been applied to account additional potential requirements.	Assumes use of on-site fuel for reclamation purposes is not accepted. See Appendix G-4, 2011A&R Plan Estimating Docs\Camp Ops\2011 A&R Plan Forecast Fuel Requirements &Assumptions File for detailed fuel balance. Total fuel requirements = 1,202,409 liters to execute A&R Plan. Cash cost = $1,535,691. Based on vendor quote and detailed 6 year fuel balance (See Appendix G-4, 2011A&R Plan Estimating Docs\Camp Ops\2011 barreled fuel quotation Assumes mobilization of fuel by Hercules aircraft and Sealift and is costed in separate tasks.
Hercules Aircraft mobilization from Yellowknife to Mary River	2				$ -	Hercules Charter	12	$113,700	$ 1,364,400	$ 1,364,400		$ 1,364,400					5%	$ 68,220		A small 5% has been applied to this cost for the following reason: 1. Cost base on firm vendor quote. 2. Vendor quote based on single flight. A 12 flight quote would reduce the unit price significantly. 3. The 12th flight is only 20% full and has excess capacity.	See Appendix G-4, 2011A&R Plan Estimating Docs\Camp Ops\2011 A&R Plan Forecast Fuel Requirements &Assumptions File for detailed estimate of pre-sealift fuel required to be mobilized by Hercules. Assume required Hercules to mobilize all pre sealift fuel to Mary River. Total volume of pre-sealift fuel = 1120 barrels. A Hercules can fly 100/flight. Required flights = 12 See Appendix G-4, 2011A&R Plan Estimating Docs\Camp Ops\2011 A&R Plan forecast Fuel Requirements and assumptions for quantity details and file See Appendix G-4, 2011A&R Plan Estimating Docs\Camp Ops\2011 Hercules Aircraft Quote for firm Hercules quote
Mary River Camp Operation Yr 2	**2**				**$ 381,550**				**$ 731,720**	**$ 1,113,270**	**$ -**	**$ 1,113,270**	**$ -**	**$ -**	**$ -**	$ -		**$ 117,422**			Based on A& R plan man days/over 4 months=1152/4 months /30 days/month= 13 person at camp each day Fixed wing 2 pilots + engineer = 3 Camp support 2 cooks + 3 dishwashers/labourers Total camp = 21
Helicopter support	2	Person Day		$0	$ -	Hours	18	$1,590	$ 28,620	$ 28,620		$ 28,620				$ -	10%	$ 2,862		Helicopter hours for year 2 are based on an inspection requirements only. A 10% contingency is justified as execution of tasks is planned.	No continuous helicopter support required in year 2. Effective 2011, helicopters will be position in Hall Beach available for general charter. Assume one mobilization & demob (5 hours return to hall beach for the purpose of a general inspection of remote camps and for planning for Year 3 activities. Assume 2 hours (Steensby inspection) + 1 hours (mid rail inspection)+6 hours (geotech hole inspection along rail route)+ 4 hours misc remote inspections. = 18 hours. See charter rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table

Camp Operations

Total Labour 1027

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Fixed wing Charter Support	2	Person Day		$0	$ -	Number of round trip charters	48	$11,900	$ 571,200	$ 571,200		$ 571,200				$ -	10%	$ 57,120		The fixed wing estimate is very conservative and already has built in contingency as described in the basis for the estimate. Given the detailed historical costs experience for complete seasonal operation of similar scope and the conservative estimate, a 10% contingency is considered adequate.	On average 3 charter flights/week will meet the needs of a 21 man camp over 4 months. Assume 3 charters/ week to move passengers and freight. See charter rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Commercial flights for25 person camp (MR & MI)	2	Person Day		$0	$ -	Flights	53	$2,300	$ 121,900	$ 121,900		$ 121,900				$ -	15%	$ 18,285		Assume a 15% contingency is appropriate to cover annual variability in percentage of contractors from the south	2011 estimate revised to reflect updated A & R Plan requirements - Assume 25 person camp operating for 16 weeks on 4 & 2 crew rotation. =4 months* 4 weeks/month/6 weeks/flight*25 persons=66 flights. The average travel expense including flight cost from Southern Canada to Iqaluit in 2009 was $2300/rotation. Assume conservative estimate that 80% of contractors or 53 flights are from southern Canada. See commercial rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
21 person camp operation	2	Person Day	620	$512	$ 317,316	Hours			$ -	$ 317,316		$ 317,316				$ -	10%	$ 31,732		This estimate is reflective of camp support staff experienced at Mary River. A contingency of 10% is appropriate to compensate for additional labour.	Basis for 2011 estimate assumes 5 support staff (2 cooks/3dishwashers/ labourers) in addition to all contractors. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Camp Operating Overhead	2	Person Day	0	$0	$ -	Monthly Lot	4	$2,500	$ 10,000	$ 10,000		$ 10,000				$ -	10%	$ 1,000		Camp overhead budgeted based on actual invoice cost in 2009. A contingency of 10% for unspecified overhead is appropriate.	Basis for 2010 estimate (Monthly costs): - Telephone & communications = 2 HSE dish at $500/month each + 4 satellite phones ($400) = $1400 - Office Supplies $300/month - Permits & licenses - Aerodrome communication & Handheld radio frequencies = $4000 annual = $800/ mth - Total monthly lot cost = $2100
Food	2	Person Day	3360	$19	$ 64,234					$ 64,234		$ 64,234				$ -	10%	$ 6,423		Food unit cost/person day based on 2009 actual invoice costs including shipping. The estimate already contains a 25% allowance for a larger camp than required by labour estimate. A contingency of 10% for additional potential food cost is appropriate.	Basis for 2011 -- Assume average number of 21 person/day for 4 months. See food estimate based on 2010 actual costs - Appendix G-3, , 22011 Mary River Average Food Cost / Person Day Table
Mary River Camp Operation Yr 3	**3**				**$ 179,744**				**$ 1,168,880**	**$ 1,348,624**	**$ -**	**$ -**	**$ 1,348,624**	**$ -**	**$ -**	$ -		**$ 185,367**			Based on A& R plan average crew size = 3688 /4 months /30 days/month= 21 person at camp each day Fixed wing 2 pilots + engineer = 3 Camp support 2 cooks + 3 dishwashers/labourers Total camp = 29

Camp Operations

Total Labour 1027

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Helicopter support	3	Person Day		$0	$ -	Hours	92	$1,590	$ 146,280	$ 146,280			$ 146,280			$ -	10%	$ 14,628		Helicopter estimates for the entire A & R plan have been recalculated based on known task productivity derived from 2009 work or distances. In addition to the helicopters hours costed for each task, an allowance of 62 hours of miscellaneous helicopter support (27% of task costed hours) has been included. Given the high certainty of the cost estimate and the large helicopter allowance already included, a contingency of 10% is considered adequate. This is a very conservative as it is a contingency on contingency.	2010 Estimate revised based the following: - Maximum 4 month operating requirement - All task requiring helicopter use already budgeted elsewhere - As a comparison - In 2009, entire ops, drill, reclamation program and general helicopter support only averaged 3 hrs/day Therefore undefined general helicopter support reduced to 0.30 hrs/day + 15 hrs mobilization from Goose Bay and 15 hrs demobilization to Goose Bay Reduced from $675K in 2009. See charter rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Fixed wing support (note: units under Equip Hrs refers to statue miles)	3	Person Day		$0	$ -	Number of round trip charters	70	$11,900	$ 833,000	$ 833,000			$ 833,000			$ -	15%	$ 124,950		The fixed wing estimate is very conservative and already has built in contingency as described in the basis for the estimate. Given the detailed historical costs experience for complete seasonal operation of similar scope and the conservative estimate, a 10% contingency is considered adequate.	On average 3.5 charter flights/week will meet the needs of a 219man camp over 4 months. Assume 4 charters/ week to move passengers and freight. See charter rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Commercial flights for 29 person camp (MR & MI)	3	Person Day		$0	$ -	Flights	77	$2,300	$ 177,100	$ 177,100			$ 177,100			$ -	15%	$ 26,565		Commercial flights estimate was based on a 2011 actual prices, a contingency of 15% is applied to address additional flights beyond the average calculation .	2011 estimate revised to reflect updated A & R Plan requirements - Assume 29 person camp operating for 50 weeks on 4 & 2 crew rotation. =5 months* 4 weeks/month/6 weeks/flight*29 persons=96 flights. The average travel expense including flight cost from Southern Canada to Iqaluit in 2009 was $2300/rotation. Assume conservative estimate that 80% of contractors or flights are from southern Canada. See commercial air flight rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
29 person camp operation	3	Person Day	750	$129	$ 96,584	Hours			$ -	$ 96,584			$ 96,584			$ -	10%	$ 9,658		This is the exact number of support staff used during 2009 when the camp size was 36 persons. A contingency of 10% is appropriate to compensate for additional labour.	Basis for 2011 estimate assumes 5 support staff (2 cooks/3dishwashers/ labourers) in addition to all contractors. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Camp Operating Overhead	3	Person Day	0	$0	$ -	Monthly Lot	5	$2,500	$ 12,500	$ 12,500			$ 12,500			$ -	10%	$ 1,250		Camp overhead budgeted based on actual invoice cost in 2009. A contingency of 10% for unspecified overhead is appropriate.	Basis for 2010 estimate (Monthly costs): - Telephone & communications = 2 HSE dish at $500/month each + 4 satellite phones ($400) = $1400 - Office Supplies $300/month - Permits & licenses - Aerodrome communication & Handheld radio frequencies = $4000 annual = $800/ mth - Total monthly lot cost = $2100
Food	3	Person Day	4350	$19	$ 83,161					$ 83,161			$ 83,161			$ -	10%	$ 8,316		Food unit cost/person day based on 2009 actual invoice costs including shipping. The estimate already contains a 25% allowance for a larger camp than required by labour estimate. A contingency of 10% for additional potential food cost is appropriate.	Basis for 2011 -- Assume average number of 29 person/day for 5 months. See food estimate based on 2010 actual costs - Appendix G-3, , 22011 Mary River Average Food Cost / Person Day Table
Steensby Inlet Camp Operation	**3**				**$ 18,118**				**$ 200**	**$ 18,318**	**$ -**	**$ 18,318**	**$ -**	**$ -**	**$ -**	$ -		**$ 1,832**			

Camp Operations

Total Labour 1027

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
6 person camp operation - Decommissioning	3	Person Day	24	$530	$ 12,720	Hours			$ -	$ 12,720		$ 12,720				$ -	10%	$ 1,272		Detailed camp operating labour costs have been estimated based on historical small camp requirements. A contingency of 10% is appropriate to compensate for additional labour.	Basis for 2011 - Requires 1 cook and a bear monitor/labourer. Last two days the camp is supported from Mary River by helicopter. See labour rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
2 person camp operation - Sealift	3	Person Day	6	$530	$ 3,180	Hours			$ -	$ 3,180		$ 3,180				$ -	10%	$ 318		Detailed camp operating labour costs have been estimated based on historical small camp requirements. A contingency of 10% is appropriate to compensate for additional labour.	2011 estimate for 3 day sealift. 3 Day temporary tent operation for sea lift support - Requires 1 cook & 1 bear monitors. Sealift labour budgeted at 2 since all the material is packaged and the sealift company has the equipment. Additional labour as support only. See labour rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Camp Operating Overhead	3	Person Day	0	$0	$ -	Monthly Lot	1	$200	$ 200	$ 200		$ 200				$ -	10%	$ 20		Camp overhead budgeted based on actual invoice cost in 2009. A contingency of 10% for unspecified overhead is appropriate.	Basis for 2011 estimate (Monthly costs): - Telephone & communications = 1satelite phone ($100) = $100 - Office Supplies $100/month - Total monthly lot cost = $200
Food	3	Person Day	116	$19	$ 2,218					$ 2,218		$ 2,218				$ -	10%	$ 222		Food unit cost/person day based on 2009 actual invoice costs including shipping. A contingency of 10% for additional potential food cost is appropriate.	2011 estimate based on Total Steensby Man days @ $19 / person day food . See food estimate based on 2010 actual costs - Appendix G-3, , 22011 Mary River Average Food Cost / Person Day Table
Milne Inlet Year 2- Operate avg 5 - person camp (16 person peak for 2 weeks)	**2**				**$ 235,563**				**$ 3,600**	**$ 239,163**	**$ -**	**$ 239,163**	**$ -**	**$ -**	**$ -**	$ -		**$ 23,916**			2011 estimate basis - Assume total labour requirements (334 man hours) over June-mid Sept = 4 man camp. However peak personnel will occur when demobing bladders at 16 for 2 weeks
6 person camp operation (Support Labour)	2	Person Day	368	$621	$ 228,528	Hours		$0	$ -	$ 228,528		$ 228,528				$ -	10%	$ 22,853		Detailed camp operating labour costs have been estimated based on historical small camp requirements. A contingency of 10% is appropriate to compensate for additional labour.	2011 estimate basis - Assume 1 cooks & 1 labourer support for camp = Total of 5 person avg. Person days reduced to 2*2 months*31 days =120 days. Add and additional cook and labourer for two months = 4 * 2 months*31 days = 248 for a total of 368 person days. See labour rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Camp Operating Overhead	2	Person Day	0	$0	$ -	Monthly Lot	4	$900	$ 3,600	$ 3,600		$ 3,600				$ -	10%	$ 360		Camp overhead budgeted based on actual invoice cost in 2009. A contingency of 10% for unspecified overhead is appropriate.	Basis for 2011 estimate (Monthly costs): - Telephone & communications = 1 HSE dish at $500/month each + 2 satellite phones ($200) = $700 - Office Supplies $200/month - Permits & licenses - Aerodrome communication & Handheld radio frequencies = Included in Mary River Cost - Total monthly lot cost = $900
Food	2	Person Day	368	$19	$ 7,035	Hours		$0	$ -	$ 7,035		$ 7,035				$ -	10%	$ 704		Food unit cost/person day based on 2009 actual invoice costs including shipping. A contingency of 10% for additional potential food cost is appropriate.	2011 estimated contains revised person days based on Milne Inlet reclamation work and camp operations support. See food estimate based on 2010 actual costs - Appendix G-3, , 22011 Mary River Average Food Cost / Person Day Table
Milne Inlet Year 3 - Operate avg 5 - person camp	**3**				**$ 158,749**				**$ 3,600**	**$ 162,349**	**$ -**	**$ 162,349**	**$ -**	**$ -**	**$ -**	$ -		**$ 16,235**			2011 estimate basis - Assume total labour requirements (334 man hours) over June-mid Sept = 4 man camp.
6 person camp operation (Support Labour)	3	Person Day	248	$621	$ 154,008	Hours		$0	$ -	$ 154,008		$ 154,008				$ -	10%	$ 15,401		Detailed camp operating labour costs have been estimated based on historical small camp requirements. A contingency of 10% is appropriate to compensate for additional labour.	2011 estimate basis - Assume 1 cooks and 1 labourer/dishwasher support for camp = Total of 5 person avg. fro 4 months. No sealift planned. Person days = 2 persons* 4 months*31 days = 248 days.

Camp Operations

Total Labour 1027

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Camp Operating Overhead	3	Person Day	0	$0	$ -	Monthly Lot	4	$900	$ 3,600	$ 3,600		$ 3,600				$ -	10%	$ 360		Camp overhead budgeted based on actual invoice cost in 2009. A contingency of 10% for unspecified overhead is appropriate.	Basis for 2011 estimate (Monthly costs): - Telephone & communications = 1 HSE dish at $500/month each + 2 satellite phones ($200) = $700 - Office Supplies $200/month - Permits & licenses - Aerodrome communication & Handheld radio frequencies = Included in Mary River Cost - Total monthly lot cost = $900
Food		Person Day	248	$19	$ 4,741	Hours		$0	$ -	$ 4,741		$ 4,741				$ -	10%	$ 474		Food unit cost/person day based on 2009 actual invoice costs including shipping. A contingency of 10% for additional potential food cost is appropriate.	2011 estimated contains revised person days based on Milne Inlet reclamation work and camp operations support. See food estimate based on 2010 actual costs - Appendix G-3, , 22011 Mary River Average Food Cost / Person Day Table
Milne Inlet Year 4 - Operate avg 14 person camp	**4**				**$ 422,547**				**$ 818,800**	**$ 1,241,347**	**$ -**	**$ 426,147**	**$ 815,200**	**$ -**	**$ -**	$ -		**$ 145,644**			2011 estimate basis - Milne Inlet will be the primary camp and assume 3rd party contractor has a mobile trailer camp to support road reclamation activity when at the Mary River end of the road. Cost camp cost under the Milne Inlet Year 4 estimate. Assume total labour requirements (1343 man hours) over May to Sept = This equivalent to 10 person days for 5 months + 2 cooks and 2 dishwasher/labourers = 14 person camp. See labour rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
14 person camp operation (Support Labour)	4	Person Day	620	$621	$ 385,020	Hours		$0	$ -	$ 385,020		$ 385,020				$ -	5%	$ 19,251		Detailed camp operating labour costs have been estimated based on historical small camp requirements. A contingency of 5% is appropriate to compensate for additional labour.	2011 estimate basis - Assume 2 cooks and 2 labourers support for camp = Total of 4 person for 5 months Person days=4 persons*5 months*31 daysmonth =620 days. See labour rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Camp Operating Overhead	4	Person Day	0	$0	$ -	Monthly Lot	4	$900	$ 3,600	$ 3,600		$ 3,600				$ -	10%	$ 360		Camp overhead budgeted based on actual invoice cost in 2009. A contingency of 10% for unspecified overhead is appropriate.	Basis for 2011 estimate (Monthly costs): - Telephone & communications = 1 HSE dish at $500/month each + 2 satellite phones ($200) = $700 - Office Supplies $200/month - Permits & licenses - Aerodrome communication & Handheld radio frequencies = Included in Mary River Cost - Total monthly lot cost = $900
Fixed wing support (note: units under Equip Hrs refers to statue miles)	3	Person Day		$0	$ -	Number of round trip charters	60	$11,900	$ 714,000	$ 714,000			$ 714,000			$ -	15%	$ 107,100		The fixed wing estimate is very conservative and already has built in contingency as described in the basis for the estimate. Given the detailed historical costs experience for complete seasonal operation of similar scope and the conservative estimate, a 10% contingency is considered adequate.	On average 3 charter flights/week will meet the needs of a 15 man camp over5 months. Assume charters/ week to move passengers and freight. See charter aircraft rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Commercial flights for Milne Inlet camp	3	Person Day		$0	$ -	Flights	44	$2,300	$ 101,200	$ 101,200			$ 101,200			$ -	15%	$ 15,180		Commercial flights estimate was based on a 2011 actual prices, a contingency of 15% is applied to address additional flights beyond the average calculation .	2011 estimate revised to reflect updated A & R Plan requirements - Assume 15 person camp operating for 50 weeks on 4 & 2 crew rotation. =5 months* 4 weeks/month/6 weeks/flight*15 persons=50 flights. The average travel expense including flight cost from Southern Canada to Iqaluit in 2009 was $2300/rotation. Assume conservative estimate that 80% of contractors or flights are from southern Canada or 40 flights. See commercial air flight rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table

Camp Operations

Total Labour 1027

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Food		Person Day	1963	$19	$ 37,527	Hours		$0	$ -	$ 37,527		$ 37,527				$ -	10%	$ 3,753		Food unit cost/person day based on 2009 actual invoice costs including shipping. A contingency of 10% for additional potential food cost is appropriate.	2011 estimated based on all manpower costed at Milne Inlet. Estimated total man days in year 4 = 1343(A&R plan execution)+(camp ops) 620= 1963. See food estimate based on 2010 actual costs - Appendix G-3, , 22011 Mary River Average Food Cost / Person Day Table
MidRail - Operate 7-person camp	**3**				**$ 7,214**				**$ 200**	**$ 7,414**	**$ -**	**$ 7,414**	**$ -**	**$ -**	**$ -**	$ -		**$ 462**			
6 person camp operation (Support Labour)	3	Person Day	9	$621	$ 5,589	Hours			$ -	$ 5,589		$ 5,589				$ -	5%	$ 279		Detailed camp operating labour costs have been estimated based on historical small camp requirements. A contingency of 5% is appropriate to compensate for additional labour.	2011 estimate basis - 9 days living at site requires 1 cook. Last 5 days are fly in. See labour rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Camp Operating Overhead	3	Person Day	0	$0	$ -	Monthly Lot	1	$200	$ 200	$ 200		$ 200				$ -	10%	$ 20		Camp overhead budgeted based on actual invoice cost in 2009. A contingency of 10% for unspecified overhead is appropriate.	Basis for 2011 estimate (Monthly costs): - Telephone & communications = 1satelite phone ($100) = $100 - Office Supplies $100/month - Total monthly lot cost = $200
Food	3	Person Day	85	$19	$ 1,625				$ -	$ 1,625		$ 1,625				$ -	10%	$ 162		Food unit cost/person day based on 2009 actual invoice costs including shipping. A contingency of 10% for additional potential food cost is appropriate.	2011 estimated contains revised person days based on Mid-Rail reclamation work and camp operations support. See food estimate based on 2010 actual costs - Appendix G-3, , 22011 Mary River Average Food Cost / Person Day Table

Environmental Monitoring

Total Labour 55

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Total					**$ 241,000**				**$ 62,636**	**$ 303,636**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 303,636**	$ -	24%	**$ 73,732**			
Environmental supervision & reporting during ongoing monitoring	2-6	Person Day	200	$1,000	$ 200,000	Hours	0	$0	$ -	$ 200,000					$ 200,000	$ -	25%	$ 50,000		The Environmental monitoring & reporting estimate is based upon detailed assumptions concerning analysis & reporting requirements. However, a relatively high contingency of 25% is considered appropriate to allow for possible under-estimation of monitoring effort & unit costs given the long time frame to completion of the task.	Assumes one third party consultant retained for of monitoring associated abandonment and reclamation project. 40 days per year for 5 years of ongoing monitoring for professional consultant site supervision and reporting. See Operator labour & equipment rates Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Environmental Monitoring Year 2					**$ 8,200**				**$ 12,527**	**$ 20,727**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 20,727**	$ -		**$ 4,746**			
Annual site visits - preparation/consumables	2	Person Day	3	$600	$ 1,800	Hours	5	$1,000	$ 5,000	$ 6,800					$ 6,800	$ -	30%	$ 2,040		Scope of work and materials developed for task. However, a relatively high contingency of 30% is considered appropriate to allow for possible under-estimation of preparation time given the long time frame to completion of the task.	3 days at site per year with $1,000 consumables while at site. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Annual site visits - water sampling (note: units under Equip Hrs refers to # samples)	2	Person Day	0	$600	$ -	Samples	42	$100	$ 4,200	$ 4,200					$ 4,200	$ -	30%	$ 1,260		Detailed sampling scope developed. However, a relatively high contingency of 30% is considered appropriate to allow for possible under-estimation of sampling time & unit costs given the long time frame to completion of the task.	Annual samples: Milne - 8 metal, 5 hydrocarbon, 3 sewage: MR - 12 metal, 5 salt, 5 hydrocarbon, 5 sewage. 2 people, 1 sample per hour average cost of $100/sample.
Annual site visit - site overview	2	Person Day	8	$800	$ 6,400	Hours	0	$0	$ -	$ 6,400					$ 6,400	$ -	20%	$ 1,280		A 20% contingency has been applied for unforeseen delays during site visits	2011 estimate based on 2 person,2 days per year to complete inspection & sampling and 1 day travel on either side. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
commercial flights for labour	2	Person Day		$0	$ -	Person Flights	2	$1,664	$ 3,327	$ 3,327					$ 3,327	$ -	5%	$ 166		Estimate based on average 2011 quote for commercial flights A 5% contingency has been applied	2011 estimate based on quoted Ottawa to Iqaluit round trip price. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Annual site visit - helicopter support	2	Person Day	0	$0	$ -	Hours	0	$1,590	$ -	$ -					$ -	$ -	0%	$ -			Requirement for helicopter eliminated. All sample points are accessible a the camps or by light vehicle to the top of Deposit #1.
Environmental Monitoring Year 3					**$ 8,200**				**$ 12,527**	**$ 20,727**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 20,727**	$ -		**$ 4,746**			
Annual site visits - preparation/consumables	3	Person Day	3	$600	$ 1,800	Hours	5	$1,000	$ 5,000	$ 6,800					$ 6,800	$ -	30%	$ 2,040		Scope of work and materials developed for task. However, a relatively high contingency of 30% is considered appropriate to allow for possible under-estimation of preparation time given the long time frame to completion of the task.	3 days at site per year with $1,000 consumables while at site. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Annual site visits - water sampling (note: units under Equip Hrs refers to # samples)	3	Person Day	0	$600	$ -	Samples	42	$100	$ 4,200	$ 4,200					$ 4,200	$ -	30%	$ 1,260		Detailed sampling scope developed. However, a relatively high contingency of 30% is considered appropriate to allow for possible under-estimation of sampling time & unit costs given the long time frame to completion of the task.	Annual samples: Milne - 8 metal, 5 hydrocarbon, 3 sewage: MR - 12 metal, 5 salt, 5 hydrocarbon, 5 sewage. 2 people, 1 sample per hour average cost of $100/sample.

Environmental Monitoring

Total Labour 55

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Annual site visit - site overview	3	Person Day	8	$800	$ 6,400	Hours	0	$0	$ -	$ 6,400					$ 6,400	$ -	20%	$ 1,280		A 20% contingency has been applied for unforeseen delays during site visits	2011 estimate based on 2 person,2 days per year to complete inspection & sampling and 1 day travel on either side. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Post 2011 commercial flights for labour	3	Person Day		$0	$ -	Person Flights	2	$1,664	$ 3,327	$ 3,327					$ 3,327	$ -	5%	$ 166		Estimate based on average 2011 quote for commercial flights A 5% contingency has been applied	2011 estimate based on quoted Ottawa to Iqaluit round trip price. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Annual site visit - helicopter support	3	Person Day	0	$0	$ -	Hours	0	$1,590	$ -	$ -					$ -	$ -	0%	$ -			Requirement for helicopter eliminated. All sample points are accessible a the camps or by light vehicle to the top of Deposit #1.
Environmental Monitoring Year 4					**$ 8,200**				**$ 12,527**	**$ 20,727**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 20,727**	$ -		**$ 4,746**			
Annual site visits - preparation/consumables	4	Person Day	3	$600	$ 1,800	Hours	5	$1,000	$ 5,000	$ 6,800					$ 6,800	$ -	30%	$ 2,040		Scope of work and materials developed for task. However, a relatively high contingency of 30% is considered appropriate to allow for possible under-estimation of preparation time given the long time frame to completion of the task.	3 days at site per year with $1,000 consumables while at site. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Annual site visits - water sampling (note: units under Equip Hrs refers to # samples)	4	Person Day	0	$600	$ -	Samples	42	$100	$ 4,200	$ 4,200					$ 4,200	$ -	30%	$ 1,260		Detailed sampling scope developed. However, a relatively high contingency of 30% is considered appropriate to allow for possible under-estimation of sampling time & unit costs given the long time frame to completion of the task.	Annual samples: Milne - 8 metal, 5 hydrocarbon, 3 sewage: MR - 12 metal, 5 salt, 5 hydrocarbon, 5 sewage. 2 people, 1 sample per hour average cost of $100/sample.
Annual site visit - site overview	4	Person Day	8	$800	$ 6,400	Hours	0	$0	$ -	$ 6,400					$ 6,400	$ -	20%	$ 1,280		A 20% contingency has been applied for unforeseen delays during site visits	2011 estimate based on 2 person,2 days per year to complete inspection & sampling and 1 day travel on either side.
Post 2011 commercial flights for labour	4	Person Day		$0	$ -	Person Flights	2	$1,664	$ 3,327	$ 3,327					$ 3,327	$ -	5%	$ 166		Estimate based on average 2011 quote for commercial flights A 5% contingency has been applied	2011 estimate based on quoted Ottawa to Iqaluit round trip price. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Annual site visit - helicopter support	4	Person Day	0	$0	$ -	Hours		$1,590	$ -	$ -					$ -	$ -	0%	$ -			Requirement for helicopter eliminated. All sample points are accessible at the camps by foot. At the end of year 3 there will be a minimum of 6 years post activity environmental monitoring at Deposit #1. No monitoring planned for Deposit #1 beyond year 3
Environmental Monitoring Year 5					**$ 8,200**				**$ 12,527**	**$ 20,727**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 20,727**	$ -		**$ 4,746**			
Annual site visits - preparation/consumables	5	Person Day	3	$600	$ 1,800	Hours	5	$1,000	$ 5,000	$ 6,800					$ 6,800	$ -	30%	$ 2,040		Scope of work and materials developed for task. However, a relatively high contingency of 30% is considered appropriate to allow for possible under-estimation of preparation time given the long time frame to completion of the task.	3 days at site per year with $1,000 consumables while at site. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table

Environmental Monitoring

Total Labour 55

	Year	Labor				Equipment				Total cost	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	>Yr 4 Cost	Check	Contingency	Contingency	NWB	Basis for 2011 Contingency	Basis for 2011 Estimate
		Units	Person Days	Unit Rate	Cost	Units	Equip Hrs	Unit Rate	Cost												
Annual site visits - water sampling (note: units under Equip Hrs refers to # samples)	5	Person Day	0	$600	$ -	Samples	42	$100	$ 4,200	$ 4,200					$ 4,200	$ -	30%	$ 1,260		Detailed sampling scope developed. However, a relatively high contingency of 30% is considered appropriate to allow for possible under-estimation of sampling time & unit costs given the long time frame to completion of the task.	Annual samples: Milne - 8 metal, 5 hydrocarbon, 3 sewage: MR - 12 metal, 5 salt, 5 hydrocarbon, 5 sewage. 2 people, 1 sample per hour average cost of $100/sample.
Annual site visit - site overview	5	Person Day	8	$800	$ 6,400	Hours	0	$0	$ -	$ 6,400					$ 6,400	$ -	20%	$ 1,280		A 20% contingency has been applied for unforeseen delays during site visits	2011 estimate based on 2 person,2 days per year to complete inspection & sampling and 1 day travel on either side. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Post 2011 commercial flights for labour	5	Person Day		$0	$ -	Person Flights	2	$1,664	$ 3,327	$ 3,327					$ 3,327	$ -	5%	$ 166		Estimate based on average 2011 quote for commercial flights A 5% contingency has been applied	2011 estimate based on quoted Ottawa to Iqaluit round trip price. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Annual site visit - helicopter support	5	Person Day	0	$0	$ -	Hours	0	$1,590	$ -	$ -					$ -	$ -	0%	$ -			Requirement for helicopter eliminated. All sample points are accessible at the camps by foot. At the end of year 3 there will be a minimum of 6 years post activity environmental monitoring at Deposit #1. No monitoring planned for Deposit #1 beyond year 3
Environmental Monitoring Year 6					**$ 8,200**				**$ 12,527**	**$ 20,727**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 20,727**	$ -		**$ 4,746**			
Annual site visits - preparation/consumables	6	Person Day	3	$600	$ 1,800	Hours	5	$1,000	$ 5,000	$ 6,800					$ 6,800	$ -	30%	$ 2,040		Scope of work and materials developed for task. However, a relatively high contingency of 30% is considered appropriate to allow for possible under-estimation of preparation time given the long time frame to completion of the task.	3 days at site per year with $1,000 consumables while at site. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Annual site visits - water sampling (note: units under Equip Hrs refers to # samples)	6	Person Day	0	$600	$ -	Samples	42	$100	$ 4,200	$ 4,200					$ 4,200	$ -	30%	$ 1,260		Detailed sampling scope developed. However, a relatively high contingency of 30% is considered appropriate to allow for possible under-estimation of sampling time & unit costs given the long time frame to completion of the task.	Annual samples: Milne - 8 metal, 5 hydrocarbon, 3 sewage: MR - 12 metal, 5 salt, 5 hydrocarbon, 5 sewage. 2 people, 1 sample per hour average cost of $100/sample.
Annual site visit - site overview	6	Person Day	8	$800	$ 6,400	Hours	0	$0	$ -	$ 6,400					$ 6,400	$ -	20%	$ 1,280		A 20% contingency has been applied for unforeseen delays during site visits	2011 estimate based on 2 person,2 days per year to complete inspection & sampling and 1 day travel on either side. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Post 2011 commercial flights for labour	6	Person Day		$0	$ -	Person Flights	2	$1,664	$ 3,327	$ 3,327					$ 3,327	$ -	5%	$ 166		Estimate based on average 2011 quote for commercial flights A 5% contingency has been applied	2011 estimate based on quoted Ottawa to Iqaluit round trip price. See Operator labour & equipment rates - Appendix G-3, , 2011 A&R Schedule of Labour, Equipment & Charter Rates Table
Annual site visit - helicopter support	6	Person Day	0	$0	$ -	Hours	0	$1,590	$ -	$ -					$ -	$ -	0%	$ -			Requirement for helicopter eliminated. All sample points are accessible at the camps by foot. At the end of year 3 there will be a minimum of 6 years post activity environmental monitoring at Deposit #1. No monitoring planned for Deposit #1 beyond year 3

List of Baffinland Equipment To Be Salvaged **2011 A & R Plan**

	Net Book Value at end 2010	Salvage Value	2011 Salvage Value (Year 1)	2012 Salvage Value (Year 2)	2013 Salvage Value (Year 3)	2014 Salvage Value (Year 4)	>2014 Salvage Value (>Year 4)	Basis for 2011 Estimate
Total Salvage	**$ 6,701,668**	**$ 2,470,971**	**$ -**	**$ 1,106,306**	**$ 1,364,665**	**$ -**	**$ -**	
Sub-Total Fixed Assets	**$ 2,927,216**	**$ 1,463,608**	$ -	**$ 98,943**	**$ 1,364,665**	$ -	$ -	
Mary River/Milne Inlet Sealift								
PO10056 Toromont-generator	$ 407,835	$ 203,917			$ 203,917			
PO10007 S Huot bardge loader	$ 197,886	$ 98,943		$ 98,943				
Cover All North	$ 197,012	$ 98,506			$ 98,506			
Steensby Inlet Sealift								
Anmar - used camp	$ 1,595,000	$ 797,500			$ 797,500			
Toromont Arctic - road handler	$ 299,629	$ 149,815			$ 149,815			
Battlefield Equipment Rentals - CAT277C	$ 84,000	$ 42,000			$ 42,000			
Battlefield Equipment Rentals - Telehandler	$ 112,000	$ 56,000			$ 56,000			
Toromont Arctic - fork extension-950H 8' with	$ 8,000	$ 4,000			$ 4,000			
Herbs welding PO50048 sled deck	$ 25,855	$ 12,928			$ 12,928			
Sub-Total Fuel Assets	**$ 3,774,452**	**$ 1,007,363**		**$ 1,007,363**				
Fuel Inventory + Barrel Deposit	**$ 3,774,452**	**$ 1,007,363**		**$ 1,007,363**				- 25% Salvage Value overall for fuel. **Barelled Fuel** - 2011 Book value of fuel = $1.38/l (purchase price) + $50 drum deposit - Total number barrels at Mary Rive, Milne Inlet and Steensby on Jan 31= 1700 barrels = 348,500 l - 2011 book value of 1700 barrels of fuel = $50 barrel deposit value + 205 l*1.38* 1700 barrels= $ 480,930. - January 31st, 2011 fuel inventory = 3,347,601 liters (See 2011 Fue Inventory File) - 2011 book value of fuel = 2,890,560 l * $1.11/l (bulk cost of fuel)= $3,208,522

The following criteria have been used to determine assets to be included in salvage - Equipment and supplies are ready to demob and are high value assets not requiring any significant labour cost/demob cost.

Mary River and Milne Inlet - Sealift volumes (m3)

Material & Equipment In		2006	2007	2008	2009	2010	A&R Year 2	Total		2006-2008 Consumed	2009 Consumed	2010 Consumed	A & R Final Destination: Completed 2008 Backhaul	Completed 2009 Backhaul	Completed 2010 Backhaul	Planned Milne Backhaul: Year 2	Year 3	Year 4	Year 5	Year 6	Landfill	Burn	A& R Outstanding Total
Freight Sealift 1		4046	17104	9497	80	382	6230.1						-72	-5168									
Freight Sealift 2			13039										-2823										
Freight Sealift 3			3849																				
A&R 3rd party Contractor																							
Total volumes		**4046**	**33992**	**9497**	**80**	**382**	**6230.1**	**54227.1**															
Salt		1808	1755	2467				**6030**		-4883	893	-200				1840							1840
Drills		209	100	80				**389**					-190	-152		199							199
Drill Steel		1089	100	652		15		**1856**		-200	-20	-100		-48							1488		1488
Tanks A Lot Sewage		154						**154**													154		154
Food		38	300	308				**646**		-338	-80	-30										198	198
BIM Mobile Equipment		382		28				**410**								410							410
QC Mobile Equipment		589						**589**					-38	-379	-172								0
Wood		61	230	232				**523**													73	450	523
Nuna Mobile Equipment			14480	443		39		**14962**					-190	-3000		11772	0						11772
Logistec			3036	281				**3317**					-2368	-949									0
Geotextile			500					**500**		-500													0
100 man camp + Gensets			1963					**1963**								190					1773		1963
Box Culvert Crossings			2580					**2580**										670					670
Fuel			2382	1149			1661.1	**5192.1**		-2532	-527					425							425
RBCs			259	62				**321**													321		321
BIM Barge loader			360					**360**								360							360
Rigmats			80					**80**													80		80
Foam Insulation			70					**70**													70		70
Water/sewage line			108					**108**													108		108
Hazguard berm liners			108	91				**199**													199		199
Oil/Lubrican			110	94				**204**		-130	-15					59							59
Steel			110	14				**124**													124		124
Core Boxes			350	60				**410**															0
Anmar			120	40				**160**					-27	-20	-66						47		47
Explosives			722					**722**		-640													0
Powdermags			800					**800**								800							800
Round Culverts				1664		7		**1671**		-1336.8								267			334.2		601.56
Salvage drums				246				**246**									0						0
O2/acetylene/propane				112				**112**					-38	-30		44							44
Toromont parts				152				**152**				-50									152		152
3rd Party Contractor							4569											4000		569			4569
Miscellaneous equp. (landfill)				706	80	321		**1107**													706		706
Sum of Individual Volumes Shipped to Mary River/Milne		4330	30623	8881	80	382	6230.1	45957.1															
Unaccounted Minor Volumes		-284	3369	616	0	0	0	8270													4080		4080
Hazardous Waste		0	0	0	0	0	0	0						-642	-84	40	0	80		10			40
Sum of Volumes for A& R										-10559.8	251	-380	-2851	-5220	-322	16139	0	5017	0	579	9709	648	

Sum of Volume Current at Project effective Dec 31, 2008	**32804.8**
Sum of Volume Current at Project effective Jan 31, 2011	**26875.3**

Sum of Volume to be Backhauled from Milne effective Jan 1, 2009	19111.6	19111.6	19111.6	19111.6
Sum of Volume to be Backhauled from Milne effective Jan 31,2011	16139	0	5017	0	579

Other Mary River Volumes

Equivalent Hercules Air Lifts	910	1010	1010	1010	1010	**1920**

Details of contents of loads is unknown. Assume this volume is equivalent to current estimated volume of Domestic non-hazardous waste in inventory at Mary River. This volume is counted on the Waste worksheet

Mary River and Milne Inlet - Sealift volumes (m3)

Material & Equipment In		2006	2007	2008	2009	2010	A&R Year 2	Total		2006-2008 Consumed	2009 Consumed	2010 Consumed	A & R Final Destination: Completed 2008 Backhaul	Completed 2009 Backhaul	Completed 2010 Backhaul	Planned Milne Backhaul: Year 2	Year 3	Year 4	Year 5	Year 6	Landfill	Burn	A& R Outstanding Total
Steensby Inlet Sealift Volume Calculations																							
Material & Equipment In		2006	2007	2008				Total		2006-2008 Consumed	2009 Consumed		A & R Final Destination: Completed 2008 Backhaul	Completed 2009 Backhaul	Completed 2009 Backhaul	Planned Steensby Backhaul:	Year 2				Landfill	Burn	A& R Outstanding Total
Steensby Inlet																							
Fuel (sealift volume cube)				2815				2815						2760	-55		55						55
Materials (cubic meters)				1563				1563									1563						1563
Equipment (cubic meters)				3523				3523						229	229		3294						3294
Total				**7901**				**7901**						**2989**	**174**		**4912**						**4912**

2011 A & R Plan Helicopter Hour Summary

Area/Task	Hours	Unit Rate	Cost	Execution Year	Basis for 2011 estimate
Mary River					
General Camp Operation & site Inspections	92	$1,590	$146,280	3	Assume Helicopter only required for 4 months and number of hours required reduced based on last years utilization (3hrs/day for entire program) and the fact that all the individual tasks are budgeted separately below. 4 mts*31 days* 0.5hr/day + 30 hours total for mob/demob from Goose Bay, Nfld.
Mineral Exploration Areas		$1,590			
Drills are removed from exploration areas	0	$1,590	$0	3	Operational requirement for all drill to be removed form the exploration area following completion of the annual drill program
Remove water lines from exploration areas	6	$1,590	$9,540	3	See details estimate worksheet
Drill holes filled and residual casings cut	18	$1,590	$28,620	3	See details estimate worksheet
Old drill camp & access road material removed	0	$1,590	$0	3	Work completed in 2009
Inspection and final reclamation of exploration drill hole locations	4	$1,590	$6,360	3	See details estimate worksheet
Miscellaneous exploration decommissioning	18	$1,590	$28,620	3	See details estimate worksheet
Milne Inlet		$1,590			See details estimate worksheet
Decommission Salt Mixing Station	2	$1,590		3	Remove material from along Mary River
Steensby		$1,590			See details estimate worksheet
Decommission Steensby Inlet Camp	36	$1,590	$57,240	3	See details estimate worksheet
Remote Locations		$1,590			See details estimate worksheet
Inspection and final reclamation of geotechnical drill holes and test pit locations	33	$1,590	$52,470	3	50% of holes completed in 2009 with 23 hrs of helicopter time. Assume 50 hours required to complete remaining 50% of holes.
Removal of casing/thermistors	16.2	$1,590	$25,758	3	Estimate reduced based on Geotech hole reclamation productivity & helicopter requirements from 2009
Decommissioning of meteorological stations (3)	3	$1,590	$4,770	3	See details estimate worksheet
Decommissioning of hydrology stations (4)	3	$1,590	$4,770	3	Helicopter hour budget revised based on detailed analysis of flying distance from MR to meters back to MR. Estimated distance is 227knots. Avg Helicopter speed is 120 k/hr. Total flying time is 227 Kn/120kn/hr = 1.9 hrs, therefore assume 3 hours of helicopter time
Decommission Mid-Rail Camp	60	$1,590	$95,400	3	See details estimate worksheet
Totals	**291.2**	$1,590	**$459,828**		

Available helicopter hours in 10 weeks (Assume Helicopter required July 1-Sept 15)	**840**	**All tasks requiring helicopter support will be executed between July 1-and Sept 15th Year 3.**
Helicopter utilization	**35%**	**Very low utliization. There will be adequate hours available o cover all helicopte support work**
Avg. Hours /day	4.2	**3 hour daily minimum contracts are standard. At 4.2 hours there should be no extra hours charged under any potential contract.**

Borrow Area Material Requirements Summary

Estimate of A & R Borrow Area Material requirements

	Labor				Equipment										
	Units	# Units	Unit Rate	Cost	Units	# Units	Unit Rate	Cost	Total cost	Year 1	Year 2	Year 3	Year 4	> Year 4	Basis for 2011 Estimate
TOTALS				$ -	Cubic Meters	18940		$ -	$ -	$ -	$ -	$ -	$ -	$ -	Borrow material may be available from the decommissioning of the Mary River & Milne inlet fuel farm & sewage lagoon berms. This has not been discounted at this time.
Stockpiles				$ -		3202		$ -	$ -	$ -	$ -	$ -	$ -	$ -	
0.3 meter cap on Milne Inlet contoured ore pads				$ -	Cubic Meters	3202		$ -	$ -		$ -	$ -	$ -		Assume .3m cover. Stockpile will be graded to maximum height of 4m with side slopes of 2:1.. Volume fill required = 8674 m {surface area}* .33 meter + (551 m {perimeter length}*1.7 meter wide face on slope (2:1 slope with avg height = .3 meter)* .33 meter fill=3202 cubes fill required to cap ore pads
				$ -				$ -	$ -		$ -	$ -	$ -		
				$ -				$ -	$ -		$ -	$ -	$ -		
				$ -				$ -	$ -		$ -	$ -	$ -		
				$ -				$ -	$ -		$ -	$ -	$ -		
Landfill				$ -		36840		$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Borrow required for access road construction				$ -	Cubic Meters	3200		$ -	$ -		$ -	$ -	$ -		Access road constructed in 2010. Borrow no longer required
Borrow required for complete construction of landfill for 5000 cubes landfill				$ -	Cubic Meters	6912		$ -	$ -		$ -	$ -	$ -		See detailed landfill volume calculations file. 25% of landfill constructed and borrow volume requirements reduced by corresponding volume.
Borrow required for operation of land fill to capacity				$ -	Cubic Meters	8668		$ -	$ -		$ -	$ -	$ -		Assume complete operating volume required. See detailed landfill volume calculations file
Borrow required for capping landfill				$ -	Cubic Meters	18060		$ -	$ -		$ -	$ -	$ -		Assume complete operating volume required. See detailed landfill volume calculations file
				$ -				$ -	$ -		$ -	$ -	$ -		
Road maintenance				$ -		0		$ -	$ -	$ -	$ -	$ -	$ -	$ -	
				$ -				$ -	$ -		$ -	$ -	$ -		
				$ -				$ -	$ -		$ -	$ -	$ -		
				$ -				$ -	$ -		$ -	$ -	$ -		
				$ -				$ -	$ -		$ -	$ -	$ -		
				$ -				$ -	$ -		$ -	$ -	$ -		
Borrow available from existing earthworks to be decommissioned				$ -		-21102		$ -	$ -	$ -	$ -	$ -	$ -	$ -	Total available
Milne - available for capping ore pads				$ -	Cubic Meters	-3202		$ -	$ -		$ -	$ -	$ -		Milne Tank Farm= 13 000m3 & Milne Lagoon 4 000m3
Mary River - Available for operating & capping landfill				$ -	Cubic Meters	-17900		$ -	$ -		$ -	$ -	$ -		Mary Tank Farm= 4 400m3 & Mary Sewage(double pond) 13 500m3
				$ -				$ -	$ -		$ -	$ -	$ -		
				$ -				$ -	$ -		$ -	$ -	$ -		
				$ -				$ -	$ -		$ -	$ -	$ -		

2011 A&R Schedule of Labour, Equipment & Charter Rates

Labour	Daily Rate	Basis for Rate	Comments
Supervisor	$ 1,241	Contractor adminstrator rate = $83.56/hour or $1241/day including weekly OT	Based on current site contractor January 2011 rates. Current contractor is positioned at the high end of the wage scale as such accurately reflects expected labour costs. See 3rd Party site labour & equipment rates quote and in place January 31, 2011. (See Appendix G-4, 2011A&R Plan Estimating Docs\Labour equipment charter rates\3rd party Contractor_Labour_Equip Rates - current Jan 31 2011 file)
Contractor Superintendent	$ 1,495	Third party contract superintendent wage rate = $100.55/hour or $1495/day including weekly OT.	
Equipment Operator	$ 996	Multi- Equipment Operator rate = $67.02/hour or $996/day including weekly OT.	
Certified Diesel Mechanic	$ 1,184	Site contractor mechanic = $79.73/hour or $1184/day including weekly OT	
Warehouse man	$ 958	Site contractor warehouseman rate = $64.46/hour	
Administrator	$ 871	Contractor adminstrator rate = $65.33/hour or $871/day including weekly OT	
Engineering & science support	$ 800	Average technician rate for technical support at Mary River in 2011	
General Labourer Rate	$ 439	Avg. QL Labourer rate = $439/day including weekly OT	Based on January 2011 rates. Assume QL Labours used to maximize local employee content. (See Appendix G-4,2011A&R Plan Estimating Docs\Labour equipment charter rates\2011 QL Contractor Rates file)
Cook	$ 621	Avg. QL cook rate = $609/day including weekly OT	
Equipment	**Hourly Rate**	**Basis for Rate**	**Comments**
Helicopter	$ 1,590	2011 contract rate with helicopter service provider	See Appendix G-4,2011A&R Plan Estimating Docs\Labour equipment charter rates\2011 Charter Helicopter Quote
Cat 966 Loader	$ 115	Based on current site contractor January 2011 rates. Current contractor is positioned at the high end of the wage scale as such accurately reflects expected labour costs. See 3rd Party site labour & equipment rates quote and in place January 31, 2011. (See Appendix G-4,2011A&R Plan Estimating Docs\Labour equipment charter rates\3rd party Contractor_Labour_Equip Rates - current Jan 31 2011 file)	
Cat 980H Loader	$ 165		
Cat 930G Loader	$ 68		
Cat D8T Dozer	$ 176		
Cat D7 Dozer	$ 149		
Cat 14H Grader	$ 110		
Cat 345 Excavator	$ 217		
Kenworth Truck (W/O pup)	$ 111		
Kenworth Truck (C/W pup)	$ 138		Same rate applies to Tractor with Scissor Deck
Bobcat	$ 66		
Blended Road Work Equipment Rate	$ 138		Calculated blended rate based on 2011 equipment contractor rates -1 dozer, 3 kenworths, 1 excavator
Kenworth with Fuel Tanker	$ 129		
Miscellaneous	**Rate**	**Basis for Rate**	**Comments**
Fixed wing charter quote	$ 11,900	Based on 2011 quote. Rate based on Iqaluit positioned aircraft for a Iqaluit - Mary River - Milne Inlet - Mary River - Iqaluit charter	See electronic quote in Appendix G-4, 2011A&R Plan Estimating Docs\Labour equipment charter rates\2011 Charter Helicopter Quote
Round trip flight Ottawa to Iqaluit.	$ 1,664	Based on Canadian North Posted Rates Feb 20, 2010	See electronic quote Appendix G-4, 2011A&R Plan Estimating Docs\Labour equipment charter rates\Cdn North Ottawa Iqaluit quote

Note:

All labour rates include employee payroll deductoins, WCB, Insurance , overhead, Administation and Profit.

All Equipment rates include insurance, maintenance, overhead, adminstration and profit.

2011 A & R Plan Labour Summary by Worksheet
(Person Days)

	Year 1	Year2	Year 3	Year 4	Year 5	Year 6	**Total**	**%**
Project Site Abandonement	35						35	1%
Bulk Sample Pit							0	0%
Mineral Exploration Areas (Deposits No. 1, 2, 3)			37				37	1%
Remote Sites			26				26	0%
Stockpiles			16				16	0%
Camps & Related Facilities		473	1716	4			812	12%
Roads & Airstrips		480	578	738			2,064	30%
Borrow Quarry Areas			143				188	3%
Fuel Storage Facilities (Bulk and Drums)		88	289				377	5%
Explosives							0	0%
Waste Management		10	132				142	2%
Hydrocarbon Impacted Soil			140	140	140	140	580	8%
General Site Area		450	600	450			1,500	22%
Sealift							36	1%
Camp Operation							1,027	15%
Environmental Monitoring		11	11	11	11	11	55	1%
Total	**35**	**1512**	**3688**	**1343**	**151**	**151**	**6,895**	**100%**
Estimated No. of Operating months annually avg monthly number of people on site over work	**0.25**	**4**	**5**	**5**	**2.5**	**2.5**		
period		**378**	**737.6**	**268.6**	**60.4**	**60.4**	**46.0**	
Average crew size		13	25	9	2	2		

Sum of All Task Mobile Equipment Hours Requirements
(For fuel estimating purposes)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	0	0	0	0	0	0
	0	0	0	0	0	0
	0	0	60	0	0	0
	0	0	0	0	0	0
	0	0	372	0	0	0
	0	1058	3855	24	0	0
	0	0	1169	4416	0	0
	0	0	1716	0	0	0
	0	297	1080	0	0	0
	0	0	0	0	0	0
	0	6	1141	0	0	0
	0	0	720	720	720	720
	0	0	0	0	0	0
	0	144	0	144	0	30
Total	**0**	**1505**	**10113**	**5304**	**720**	**750**

Fuel Requirements For Mobile Equipment Operation
(Not including Freshet Operation)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Comments
Annual Equipment Hours	**0**	**1505**	**10113**	**5304**	**720**	**750**	**18392**	
Pre Year 2 Sealift Equipment Hours		510	0	0		0	**510**	
Post Year 2 sealift Equipment Hours	0	995	10113	5304	720	750	**17882**	
arithmetic average of the manufacturers projected fuel use at a medium load factor for Heavy Equipment	31.4	31.4	31.4	31.4	31.4	31.4		**For the purpose of estimating fuel consumption, assume the use of the arithmetic average of the manufacturers projected fuel use at a medium load factor. This estimate is conservative, as it provides a higher fuel consumption than the actual weighted average. Arithmetic average derived form the 2011 A&R Plan forecast fuel requirements & assumptions file**
Annual Heavy Equipment Fuel requirements Post year 2 sealift	**0**	**31257**	**317548**	**166545.6**	**22608**	**23550**	**561509**	

2011 Mary River Average Food Cost / Person Day

Week	Food Order Weight (kg/order)	Invoice cost/order ($)	CN frieght cost (Val D'Or - Iqaluit) ($)	BBE Freight Handling (Iqaluit) ($)	Total Cost ($)	Person Days	Total Food Cost per Person day ($/Person day)
June	1,794	6,898.37	6,789.37	121.99	13,809.74	1,189	11.6145799
July	2,857	22,571.56	10,395.09	194.28	33,160.93	1,209	27.42839578
August	4,725	9,982.98	16,288.78	321.30	26,593.06	1,450	18.34003862
Total	9,376	39,452.91	33,473.24	637.57	73563.72	3848	

Average Food Cost/Person Day= $ 19.12

BBE Total fright Handling Cost/kg= 0.068