

SUMMARY OF COSTS

CAPITAL COSTS	COMPONENT NAME	COST	LAND LIABILITY	WATER LIABILITY
WELLS AND FACILITIES		\$0	\$0	\$0
BUILDINGS AND EQUIPMENT		\$388,605	\$242,803	\$145,803
CHEMICALS AND CONTAMINATED SOIL MANAGEME		\$51,186	\$25,593	\$25,593
SURFACE AND GROUNDWATER MANAGEMENT		\$0	\$0	\$0
INTERIM CARE AND MAINTENANCE		\$0	\$0	\$0
	SUBTOTAL: Capital Costs	\$439,791	\$268,396	\$171,396
	PERCENT OF SUBTOTAL		61%	39%

INDIRECT COSTS		COST	LAND LIABILITY	WATER LIABILITY
MOBILIZATION/DEMOBILIZATION		\$225,310	\$137,502	\$87,808
POST-CLOSURE MONITORING AND MAINTENANCE		\$51,000	\$31,124	\$19,876
ENGINEERING	5%	\$21,990	\$13,420	\$8,570
PROJECT MANAGEMENT	5%	\$21,990	\$13,420	\$8,570
HEALTH AND SAFETY PLANS/MONITORING & QA/QC	1%	\$4,398	\$2,684	\$1,714
BONDING/INSURANCE	1%	\$4,398	\$2,684	\$1,714
CONTINGENCY	20%	\$87,958	\$53,679	\$34,279
MARKET PRICE FACTOR ADJUSTMENT	0%	\$0	\$0	\$0
	SUBTOTAL: Indirect Costs	\$417,043	\$254,513	\$162,530

TOTAL COSTS		\$856,835	\$522,909	\$333,926
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1 Building / Equip Name:		Bldg / Equip #: 1							
ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
OBJECTIVE: DISPOSE MOBILE EQUIPMENT									
Ship off-site - remove to Fort Simpson	All equipment removed (listed in Appendix V	each	78	#/N/A	\$750.00	\$58,500	100%	\$58,500	\$0
Decontaminate, dispose on-site		each		#/N/A	\$0.00	\$0		\$0	\$0
Other		each		#/N/A	\$0.00	\$0		\$0	\$0
OBJECTIVE: BUILDING DECONTAMINATION & HAZ. MATERIAL REMOVAL									
Decontaminate, oil, fuel and glycol systems		mandays		#/N/A	\$0.00	\$0		\$0	\$0
Decontaminate, general		mandays		#/N/A	\$0.00	\$0		\$0	\$0
Mechanical		mandays		#/N/A	\$0.00	\$0		\$0	\$0
Electrical		mandays		#/N/A	\$0.00	\$0		\$0	\$0
Decontaminate maintenance shop		each		#/N/A	\$0.00	\$0		\$0	\$0
Decontaminate power plant		each		#/N/A	\$0.00	\$0		\$0	\$0
Decontaminate bulk fuel storage		each		#/N/A	\$0.00	\$0		\$0	\$0
Decontaminate offices/warehouse/accorn		each		#/N/A	\$0.00	\$0		\$0	\$0
Removal of asbestos siding on buildings		each		#/N/A	\$0.00	\$0		\$0	\$0
Removal of friable asbestos on equipment		each		#/N/A	\$0.00	\$0		\$0	\$0
Other				#/N/A	\$0.00	\$0		\$0	\$0
OBJECTIVE: REMOVE BUILDINGS - ALL BUILDING AREAS SCALED TO ACCOUNT FOR HEIGHT									
Accommodation Complex	Removal of 45 Trailers	each	1	MCR1	\$50,000.00	\$50,000	100%	\$50,000	\$0
Process Facilities		m2		#/N/A	\$0.00	\$0		\$0	\$0
Offices, Repair, Lab, Warehouse		m2		#/N/A	\$0.00	\$0		\$0	\$0
Storage Facilities		m2		#/N/A	\$0.00	\$0		\$0	\$0
Water and Wastewater Treatment Facilities	Removal of stored sanitary waste (16 m3/day from Ma 1 to Oct 1) - vac truck to sewage lagoon	monthly	5	#/N/A	\$1,500.00	\$7,500	50%	\$3,750	\$3,750
U/G Heating Plant		m2		#/N/A	\$0.00	\$0		\$0	\$0
Emulsion Plant		m2		#/N/A	\$0.00	\$0		\$0	\$0
AN Storage Facility		m2		#/N/A	\$0.00	\$0		\$0	\$0
Warehouse, Shops and Other		m2		#/N/A	\$0.00	\$0		\$0	\$0
Storage Facility at Laydown/Airstrip		m2		#/N/A	\$0.00	\$0		\$0	\$0
Fuel tanks - Diesel and gasoline	Removal - 2 haul trucks	each	2	#/N/A	\$750.00	\$1,500	50%	\$750	\$750
Fuel Tanks -Propane	Removal - 1 haul truck	each	1	#/N/A	\$750.00	\$750	100%	\$750	\$0
Drill waste tanks - fluids and cuttings	Removal - by 2 haul trucks/drill area	alloc	4	#/N/A	\$1,500.00	\$6,000	50%	\$3,000	\$3,000
Reclaim pumps		m2		#/N/A	\$0.00	\$0		\$0	\$0
Outfall & Diffuser		m2		#/N/A	\$0.00	\$0		\$0	\$0
Airstrip lighting, navigation, electrician		mandays		#/N/A	\$0.00	\$0		\$0	\$0
Airstrip lighting, navigation, mechanical		mandays		#/N/A	\$0.00	\$0		\$0	\$0
Consolidate & dump boneyard debris	Removal of stored domestic waste (1 m3/day from May 1 to Oct 1) - haul inert waste to landfill by haul truck	alloc	1	#/N/A	\$750.00	\$750	100%	\$750	\$0
Pipeline Removal		m3		#/N/A	\$0.00	\$0		\$0	\$0
OBJECTIVE: BREAK BASEMENT SLABS									
Accommodation Complex		m2		#/N/A	\$0.00	\$0		\$0	\$0
Process Facilities		m2		#/N/A	\$0.00	\$0		\$0	\$0
Offices, Repair, Lab, Warehouse		m2		#/N/A	\$0.00	\$0		\$0	\$0
Storage Facilities		m2		#/N/A	\$0.00	\$0		\$0	\$0
Water and Wastewater Treatment Facilities		m2		#/N/A	\$0.00	\$0		\$0	\$0
U/G Heating Plant		m2		#/N/A	\$0.00	\$0		\$0	\$0
Emulsion Plant		m2		#/N/A	\$0.00	\$0		\$0	\$0
Warehouse, Shops and Other		m2		#/N/A	\$0.00	\$0		\$0	\$0
Other				#/N/A	\$0.00	\$0		\$0	\$0
OBJECTIVE: LANDFILL FOR DEMOLITION WASTE									
Place soil cover		m3		#/N/A	\$0.00	\$0		\$0	\$0
Vegetate		ha		#/N/A	\$0.00	\$0		\$0	\$0
Landfill disposal fee		tonne		#/N/A	\$0.00	\$0		\$0	\$0
OBJECTIVE: GRADE AND CONTOUR									
Accommodation Complex	camp(s) contoured and restore drainage	ha	1.83	scfyl	\$4,300.00	\$7,869	50%	\$3,935	\$3,935
Process Facilities		ha		#/N/A	\$0.00	\$0		\$0	\$0
Offices, Repair, Lab, Warehouse		ha		#/N/A	\$0.00	\$0		\$0	\$0
Storage Facilities		ha		#/N/A	\$0.00	\$0		\$0	\$0
Water and Wastewater Treatment Facilities		ha		#/N/A	\$0.00	\$0		\$0	\$0
U/G Heating Plant		ha		#/N/A	\$0.00	\$0		\$0	\$0
Emulsion Plant		ha		#/N/A	\$0.00	\$0		\$0	\$0
Warehouse, Shops and Other		ha		#/N/A	\$0.00	\$0		\$0	\$0
Place rock cover		m3		#/N/A	\$0.00	\$0		\$0	\$0
Vegetate camps area	assumed half the area revegetated	ha	0.9	vhfl	\$4,000.00	\$3,600	50%	\$1,800	\$1,800
Other				#/N/A	\$0.00	\$0		\$0	\$0
OBJECTIVE: LINED SUMPS									
Place soil cover	50x50x3 * 2	m3	15000	SC3h	\$14.20	\$213,000	50%	\$106,500	\$106,500
OBJECTIVE: RECLAIM ROADS									
Remove culverts - haul to Fort Simpson	includes matting for crossings - by dozer	each	2	#/N/A	\$1,500.00	\$3,000	0%	\$0	\$3,000
Remove bridges - haul to Fort Simpson	span crossing and abutments - by loader and	each	1	#/N/A	\$10,000.00	\$10,000	0%	\$0	\$10,000
Scarify and install water breaks		ha		#/N/A	\$0.00	\$0		\$0	\$0
Scarify airstrip		ha		#/N/A	\$0.00	\$0		\$0	\$0
Scarify laydown areas	entire staging area	ha	1.52	scfyl	\$4,300.00	\$6,536	50%	\$3,268	\$3,268
Vegetate	assumed half the area revegetated	ha	4.65	vhfl	\$4,000.00	\$18,600	50%	\$9,300	\$9,300
Other		ha		#/N/A	\$0.00	\$0		\$0	\$0
SPECIALIZED ITEMS									
Dispose of misc. debris and laydown area re geotextile - disposal tipping fees			1	#/N/A	\$1,000.00	\$1,000	50%	\$500	\$500
Total						\$388,605		\$242,803	\$145,803
% of Total								62.48	37.52

1 Chemicals/Soil Area Name:

Note: The procedures, equipment and packaging for clean up and removal of chemicals or contaminated soils are highly dependent on the nature of the chemicals and their existing state of containment. Government guidelines should be consulted on an individual chemical basis. Any estimate made here should be considered very rough unless specific evaluations have been conducted.

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost	
HAZARDOUS MATERIALS AUDIT										
Phase 1 audit	inspecting, packaging and labeling - one tim	Manho	40	envcol	\$74.16	\$2,966	50%	\$1,483	\$1,483	
Phase 2 audit		Manhours		#N/A	\$0.00	\$0		\$0	\$0	
CONSOLIDATE HAZARDOUS MATERIALS FOR REMOVAL										
Waste oils	from proj. desc. 153 litres shipped to approv	alloc	1	#N/A	\$5,000.00	\$5,000	50%	\$2,500	\$2,500	
Fuel - Type 1, eg diesel dregs		litre		#N/A	\$0.00	\$0		\$0	\$0	
Fuel - Type 1, eg gasoline dregs		litre		#N/A	\$0.00	\$0		\$0	\$0	
Waste batteries		kg		#N/A	\$0.00	\$0		\$0	\$0	
Assay & environmental lab reagents		kg		#N/A	\$0.00	\$0		\$0	\$0	
Machine shop, paints, solvents etc		litre		#N/A	\$0.00	\$0		\$0	\$0	
Contaminated soils - hydrocarbon		m3		#N/A	\$0.00	\$0		\$0	\$0	
Metal contam. soil at conc. load-out		m3		#N/A	\$0.00	\$0		\$0	\$0	
Glycol		litre		#N/A	\$0.00	\$0		\$0	\$0	
Other hazardous materials		litre		#N/A	\$0.00	\$0		\$0	\$0	
HAZARDOUS MATERIALS - see waste removal below										
Transportation to disposal facility		allow		#N/A	\$0.00	\$0		\$0	\$0	
Disposal fees		allow		#N/A	\$0.00	\$0		\$0	\$0	
Other				#N/A	\$0.00	\$0		\$0	\$0	
CONTAMINATED SOILS										
Contam. soil investigation - technical	Treat onsite - assumed 100m3 per drill site	each	200	CSRh	\$146.00	\$29,200	50%	\$14,600	\$14,600	
Contam. soil investigation - drilling & samplir	Soil testing	each	3	Slh	\$3,600.00	\$10,800	50%	\$5,400	\$5,400	
CONTAMINATED SOIL REMOVAL										
Contaminated soils - hydrocarbon	assumed 100 m3 removed per drill site	m3	200	SC1l	\$6.80	\$1,360	50%	\$680	\$680	
Metal contam. soil at conc. load-out		m3		#N/A	\$0.00	\$0		\$0	\$0	
Load, haul, dump or doze		m3		#N/A	\$0.00	\$0		\$0	\$0	
Reagents/stabilizing agent		m2		#N/A	\$0.00	\$0		\$0	\$0	
Contour reclaimed area	restored soil removal area by dozer	m3	200	SC1h	\$9.30	\$1,860	50%	\$930	\$930	
Type 2, heavy fuel and oil		m3		#N/A	\$0.00	\$0		\$0	\$0	
CONTAMINATED SOIL VERY LOW PERMEABILITY COVER										
Supply geomembrane, HDPE, ES3, GCL		m2		#N/A	\$0.00	\$0		\$0	\$0	
Upper and lower bedding layers		m3		#N/A	\$0.00	\$0		\$0	\$0	
Install geomembrane, HDPE, ES3, GCL		m2		#N/A	\$0.00	\$0		\$0	\$0	
Erosion protection layer		m3		#N/A	\$0.00	\$0		\$0	\$0	
Vegetate		m2		#N/A	\$0.00	\$0		\$0	\$0	
Install infiltration/seepage instrumentation		allow		#N/A	\$0.00	\$0		\$0	\$0	
Other				#N/A	\$0.00	\$0		\$0	\$0	
WASTES REMOVAL										
Drilling Fluid	disposed in sump			#N/A	\$0.00	\$0		\$0	\$0	
Drill Cuttings	disposed in sump			#N/A	\$0.00	\$0		\$0	\$0	
Spent Water	disposed in sump			#N/A	\$0.00	\$0		\$0	\$0	
		alloc		#N/A	\$0.00	\$0		\$0	\$0	
						Total		\$51,186	\$25,593	\$25,593
						% of Total			50	50

1 Post-Closure Monitoring & Maintenance:

ACTIVITY/MATERIAL	Notes	Unit s	Quantit y	Cost Code	Unit Cost	Cost
OBJECTIVE: MONITORING & INSPECTIONS						
Annual inspection and reporting	each year for 3 years - sump performance	each	1	RPTI	\$10,000.00	\$10,000
Survey inspection		each		#N/A	\$0.00	\$0
Site water monitoring - includes access	Includes veg. and erosion monitoring	each	1	wsl	\$7,000.00	\$7,000
- During pit flooding		each		#N/A	\$0.00	\$0
- Post pit flooding		each		#N/A	\$0.00	\$0
Air Quality Monitoring Program (AQMP)		each		#N/A	\$0.00	\$0
Wildlife Effects Monitoring Program (WEMP)		each		#N/A	\$0.00	\$0
Vegetation Monitoring		each		#N/A	\$0.00	\$0
Other				#N/A	\$0.00	\$0
OBJECTIVE: SITE MAINTENANCE						
Repair erosion - infill gullies		allow		#N/A	\$0.00	\$0
Repair erosion - upgrade diversion ditches		allow		#N/A	\$0.00	\$0
Remove problem vegetation		allow		#N/A	\$0.00	\$0
Repair animal damage		allow		#N/A	\$0.00	\$0
Repair/upgrade access controls		allow		#N/A	\$0.00	\$0
Other - Erosion control - channel stabilization		allow		#N/A	\$0.00	\$0
SPILLWAY MAINTENANCE						
Repair erosion		m3		#N/A	\$0.00	\$0
Clear spillway		each		#N/A	\$0.00	\$0
Other				#N/A	\$0.00	\$0
POST-CLOSURE WATER TREATMENT						
Annual water treatment cost, from "Water Treatment"						\$0
Subtotal, Annual post-closure costs						\$17,000
Discount rate for calculation of net present value of post-closure cost, %				0.00%	*Note NPV is only considered for long term closure req	
Number of years of post-closure activity				3 years		
Present Value of payment stream						\$51,000

uirements that are greater than 20 years after operations.

1 Mobilization/Demobilization:

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost
MOBILIZE HEAVY EQUIPMENT						
Excavators	Contract and mob from Fort Simpson	alloc	1	#N/A	2500	\$2,500
Dump trucks	Contract and mob from Fort Simpson	alloc	1	#N/A	2500	\$2,500
Dozers	Contract and mob from Fort Simpson	alloc	1	#N/A	2500	\$2,500
Demolition shears		each		#N/A	0	\$0
Crane		each		#N/A	0	\$0
Loader		each		#N/A	0	\$0
Compactor		each		#N/A	0	\$0
Light duty vehicles	assumed 2 rentals \$1000/week	month	2	MHER	4000	\$8,000
MOBILIZE MISC. EQUIPMENT						
Pump shipping		each		#N/A	0	\$0
Pipe shipping		m		#N/A	0	\$0
Minor tools and equipment	hand tools, fuel, rental small loader, etc.	allow	1	#N/A	5000	\$5,000
Truck tires		allow		#N/A	0	\$0
Other				#N/A	0	\$0
MOBILIZE CAMP						
Reclamation activities	Food and incidentals	allow	30	ACCMs	75	\$2,250
Long term reclamation activities (eg pump flooding)		allow		#N/A	0	\$0
MOBILIZE WORKERS						
Reclamation activities - transport	Bus - \$250/ way for dropoff and pickup	days	30	#N/A	500	\$15,000
Reclamation activities - worker wages	10 workers, 30 days, 12 hr shifts	anhours	3600	lab-sl	49.6	\$178,560
Long term reclamation activities (eg pump flooding) - transport		each		#N/A	0	\$0
Long term reclamation activities (eg pump flooding) - travel time		each		#N/A	0	\$0
Monitoring Airfare - last remediation and inspections after bridge removed	\$1,500 /way	days	2	#N/A	3000	\$6,000
WORKER ACCOMODATIONS						
Reclamation activities	Food and incidentals	manmo	30	ACCMi	100	\$3,000
Long term reclamation activities (eg pump flooding)		manmonths		#N/A	0	\$0
MOBILIZE FUEL						
Fuel freight - reclamation activities		litre		#N/A	0	\$0
Fuel freight - long reclamation activities		litre		#N/A	0	\$0
Fuel freight accomodations		litre		#N/A	0	\$0
WINTER ROAD						
Construction and operation		km		#N/A	0	\$0
Limited winter use		km		#N/A	0	\$0
Winter road tarriff		km		#N/A	0	\$0
DEMOBILIZE OTHER INFRASTRUCTURE AND SITE EQUIPMENT						
Excavators	To Fort Simpson	alloc	1	#N/A	2500	\$2,500
Dump trucks	To Fort Simpson	alloc	1	#N/A	2500	\$2,500
Dozers	To Fort Simpson	alloc	1	#N/A	2500	\$2,500
Demolition shears		km		#N/A	0	\$0
Crane		km		#N/A	0	\$0
Loader		km		#N/A	0	\$0
Compactor		each		#N/A	0	\$0
Light duty vehicles		km		#N/A	0	\$0
Fuel - disposal of remnants in tanks	assumed 20% of total fuel 144,327 L.	litres	28865	FMh	0.42	\$12,123
DEMOBILIZE CAMP						
Temporary camp		allow		#N/A	0	\$0
DEMOBILIZE WORKERS						
crew travel time		mandays		lab-sl	0	\$0
crew transportation		each		#N/A	0	\$0
WINTER ROAD						
Construction and operation		km		#N/A	0	\$0
Limited winter use		km		#N/A	0	\$0
Winter road tarriff		km		#N/A	0	\$0
Mobilization/Demobilization Cost						\$225,310