

1 Building / Equip Name: _____ Bldg / Equip #: <u>1</u>								
ACTIVITY/MATERIAL	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
A OBJECTIVE: DISPOSE MOBILE EQUIPMENT (Decontaminate and ship to Milne Inlet)								
Demobilize mobile equipment to Milne Inlet - 100km by road	\$/km/60pc	6000	MHERI	2.81	\$16,860	100%	\$16,860	\$0
B OBJECTIVE: DISPOSE STATIONARY EQUIPMENT (Decontaminate and ship to Milne Inlet)								
Demobilize stationary equipment to Milne Inlet - 100km by road - drills, generators, sewage treatment plant, etc.	\$/km/15pc	1500	MHERI	2.81	\$4,215	100%	\$4,215	\$0
C OBJECTIVE: DISPOSE ORE CONCENTRATION EQUIPMENT (Decontaminate and ship to Milne Inlet)								
NUNA Logistics Crushing Plant - crusher, conveyors, radial stackers, etc	\$/km/11pc	1100	MHERI	2.81	\$3,091	100%	\$3,091	\$0
D OBJECTIVE: DISPOSE WATER TREATMENT EQUIPMENT (Decontaminate and ship to Milne Inlet)								
Remove tanks	\$/km/2 pcs	200	MHERI	2.81	\$562	100%	\$562	\$0
Remove plumbing	m	1000	PPSI	0.5	\$500	100%	\$500	\$0
E OBJECTIVE: DECONTAMINATE BUILDINGS & TANKS (and ship to Milne Inlet)								
Demolish maintenance garage and dispose in landfill.	person-days	4	#N/A	500	\$2,000	100%	\$2,000	\$0
Camp (Mary River Camp, Milne Inlet, Mid-way and temp. drill camps) Drain, fold, and containerize Mary River and Milne Inlet bulk fuel bladders and truck containers of tanks (3 containers) from Mary River to Milne Inlet	person-days	60	#N/A	500	\$30,000	100%	\$30,000	\$0
Remove geomembrane liner offsite	L.S.	1	#N/A	41,000	\$41,000	100%	\$41,000	\$0
Transport geomembrane liner to Milne Inlet	m3	1000	SB2h	5.97	\$5,970	100%	\$5,970	\$0
Decontaminate buried concrete sewage system tank in A-Lot	m3	1000	CSRI	38.5	\$38,500	100%	\$38,500	\$0
	person-days	4	#N/A	500	\$2,000	100%	\$2,000	\$0
F OBJECTIVE: MOTHBALL BUILDINGS								
• No buildings (mothball) will remain								
Airstrips will remain (inspect and repair any erosion)	m3	5000	DSI	0.78	\$3,900	100%	\$3,900	\$0
G OBJECTIVE: REMOVE BUILDINGS (to Milne Inlet)								
Mary River - seasonal camp	m2	5000	BRW1l	21.5	\$107,500	100%	\$107,500	\$0
Mary River - all weather camp - including treatment plant, airstrip light	m2	5000	BRW1l	21.5	\$107,500	100%	\$107,500	\$0
4 wooden buildings at Mary River (< 200 ft ² each)	m2	80	BRW2l	5.5	\$440	100%	\$440	\$0
NUNA Logistics Milne Inlet camp	m2	1000	BRW1l	21.5	\$21,500	100%	\$21,500	\$0
Mid-way camp	m2	100	BRW1l	21.5	\$2,150	100%	\$2,150	\$0
Temporary drill camps (helicopter support included in mobilization cos	m2	500	BRW1l	21.5	\$10,750	100%	\$10,750	\$0
Remove boneyard waste to landfill	m3	1000	SB1h	4.85	\$4,850	100%	\$4,850	\$0
Truck 100 containers to Milne Inlet - includes camp items, comm.								
Towers, tents, etc	\$/km/100 pcs	10000	MHERI	2.81	\$28,100	100%	\$28,100	\$0
H OBJECTIVE: BREAK BASEMENT SLABS								
• No concrete slabs are present. The camp structures are founded on wooden floor systems.								
I OBJECTIVE: REMOVE BURIED TANKS								
Demolish buried concrete sewage system tank in A-Lot	m3	500	RB1l	9.35	\$4,675	100%	\$4,675	\$0
Remove demolish buried concrete sewage system tank in A-Lot to lan	m3	500	SB1h	4.85	\$2,425	100%	\$2,425	\$0
J OBJECTIVE: LANDFILL FOR DEMOLITION WASTE								
Placement of waste materials into landfill	m3	1000	SB1h	4.85	\$4,850	100%	\$4,850	\$0
Apply cover over landfill	m3	1000	SB4h	8.95	\$8,950	100%	\$8,950	\$0
K OBJECTIVE: GRADE AND CONTOUR								
Recontour camp site areas as required (using dozer)	m3	10000	DSh	3.11	\$31,100	100%	\$31,100	\$0

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L OBJECTIVE: RECLAIM ROADS

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Subtotal

1 **Chemicals and Soil Contamination: Camps and Operations 1**

ACTIVITY/MATERIAL	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
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.								
A LABORATORY CHEMICALS								
. Miscellaneous	pallet	1	LCRh	2320	\$2,320	100%	\$2,320	\$0
B PCB, hauling								
. • No PCB's								
C FUEL								
. Any excess fuel at Mary River will be burned. Management will ensure excess fuel will be kept to a minimum.	litre	5000	OBh	0.55	\$2,750	100%	\$2,750	\$0
D WASTE OIL								
. Oils/lubricants - transported to Milne Inlet	litre	6000	ORI	0.35	\$2,100	100%	\$2,100	\$0
E PROCESS OR TREATMENT CHEMICALS								
. • None								
F EXPLOSIVES								
. Transport explosives magazines to Milne Inlet	\$/km/16 pcs	1600	MHERH	8.42	\$13,472	100%	\$13,472	\$0
G CONTAMINATED SOILS								
. Excavate contaminated materials	m3	1000	SB1h	4.85	\$4,850	100%	\$4,850	\$0
. Transport contaminated materials to Milne Inlet	m3	1000	CSRI	38.5	\$38,500	100%	\$38,500	\$0
. Backfill excavation	m3	1000	SB1h	4.85	\$4,850	100%	\$4,850	\$0
H Haz. Mat. testing & assessment								
. Technician and analyses	L.S.	1	#N/A	50000	\$50,000	100%	\$50,000	\$0
OTHER								
. Haz. Mat. waste disposal fee	L.S.	1	#N/A	50000	\$50,000	100%	\$50,000	\$0
Subtotal					\$168,842	100.0%	\$168,842	\$0
					Total Chemical	Percent Land	Total Land	Total Water

1 **Water Management Project: Bulk Sample Project # 1**

ACTIVITY/MATERIAL	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
A OBJECTIVE: STABILIZE EMBANKMENT								
• No embankment								
B OBJECTIVE: UPGRADE SPILLWAY								
• No spillway								
C OBJECTIVE: STABILIZE SEDIMENT CONTAINMENT PONDS								
• Regrade two sediment containment ponds with dozer	m3	1000	DSI	0.78	\$780	0%	\$0	\$780
D OBJECTIVE: BREACH EMBANKMENT								
• No embankment								
E OBJECTIVE: STABILIZE DITCHES								
• No ditches								
F OBJECTIVE: BREACH DITCHES								
• No ditches								
G OBJECTIVE: REMOVE PIPELINES								
• Remove pipes - Included in Activity E of Bldgs & Equip worksheet								
H OBJECTIVE: REMOVE STORAGE TANKS								
• Remove tanks & plumbing - Included in Activity D of Bldgs & Equip worksheet								
I OBJECTIVE: COLLECT DRAINAGE FOR TREATMENT								
• No ongoing treatment required								
J OBJECTIVE: TREAT DRAINAGE (see "ONGOING TREATMENT" for operating costs)								
• No treatment plant necessary								
Subtotal					\$780 Total Water	0.0% Percent Land	\$0 Total Land	\$780 Total Water

1		Mobilization Name:		Mob # 1					
ACTIVITY/MATERIAL		Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
A MOBILIZE HEAVY EQUIPMENT									
Equipment to regional centre									
. Dedicated sealift for materials from Milne Inlet to Montreal requiring off-site salvage or disposal.		L.S.	1	#N/A	1E+06	\$1,200,000		\$0	\$1,200,000
Equipment, regional centre to site									
. • Sufficient equipment on site from bulk sample program for reclamation activities - NUNA/QC/BIM									
B MOBILIZE CAMP									
. • Use existing camp for reclamation									
C MOBILIZE WORKERS									
. MOB workers		person	80	MM>I	990	\$79,200	100%	\$79,200	\$0
D MOBILIZE MISC. SUPPLIES									
. • Sufficient supplies remain from bulk sample program for reclamation activities									
. Helicopter and Air Plane Support		month	4	#N/A	80000	\$320,000	90%	\$288,000	\$32,000
E MOBILIZE & HOUSE WORKERS person days									
. Operate 20-person camp for 4 months		month	80	ACCMI	1320	\$105,600	100%	\$105,600	\$0
WINTER ROAD									
. • No winter use									
F BONDING									
. 2.5 basis points of total bond amount		0.00025	1	#N/A	885.94	\$886	100%	\$886	\$0
G TAXES lump sum		L.S.	1	#N/A	20000	\$20,000	100%	\$20,000	\$0
H INSURANCE lump sum		L.S.	1	#N/A	100000	\$100,000	100%	\$100,000	\$0
Subtotal						\$1,825,686	32.5%	\$593,686	\$1,232,000
						Total Mob.	Percent Land	Total Land	Total Water

1		Monitoring & Maintenance		Mon / Mtce #		1			
ACTIVITY/MATERIAL		Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
A OBJECTIVE: INSPECTIONS									
. Site supervision during final abandonment		\$/month	4	Vlh	30000	\$120,000	80%	\$96,000	\$24,000
. Water sampling		year	1	WSh	9000	\$9,000	0%	\$0	\$9,000
. Additional water sampling costs per year		year	1	WSh	9000	\$9,000	0%	\$0	\$9,000
. Reporting		report	1	RPT	11000	\$11,000	80%	\$8,800	\$2,200
B OBJECTIVE: MAINTENANCE									
. No items will remain that need to be maintained post-closure. A contingency amount has been added (SEE POST CLOSURE COSTS) to mitigate any observed ARD/ML during post-closure site visits.									
Subtotal						\$149,000	70.3%	\$104,800	\$44,200
						Total Pits	Percent Land	Total Land	Total Water

1 Post-Closure Site Maintenance

ACTIVITY/MATERIAL	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
A WATER TREATMENT								
<ul style="list-style-type: none"> Not Applicable. On-going water treatment will not occur. Shallow pit areas will remain free draining. If visual observation or runoff water analyses suggest acid generation or metal leaching during site visits a contingency plan will be implemented (SEE BELOW). 								
B Cover Maintenance								
<ul style="list-style-type: none"> Cover material on the site is not required except for the landfill. A cover (0.6m) will be placed on the landfill with gentle slopes. Ongoing problems with erosion and integrity is not anticipated. However, the cover will be inspected every year for 5 years post closure (SEE BELOW). 								
C Spillway Maintenance								
<ul style="list-style-type: none"> Not applicable. No spillways to maintain. 								
D Other								
Annual site visits (4 years post closure)	visit	4	VIh	7100	\$28,400	80%	\$22,720	\$5,680
Annual reporting (4 years post closure)	report	4	RPTb	11000	\$44,000	80%	\$35,200	\$8,800
Annual water sampling (20 samples; 4 years post closure)	year	1	WSh	9000	\$9,000	0%	\$0	\$9,000
Additional water sampling costs per year	year	1	WSh	9000	\$9,000	0%	\$0	\$9,000
Contingency: Remediation of ARD/ML and stockpile includes quarry, transport and place buffering material (local overburden). Correcting any unstable areas of the shallow pit may include additional blasting, excavation or backfilling using weathered ore.	m3	30000	SB2h	5.97	\$179,100	100%	\$179,100	\$0
Subtotal, Annual post-closure costs					\$90,400		\$57,920	\$32,480
Discount rate for calculation of net present value of post-closure cost, %				3.00%			\$0	
Number of years of post-closure activity				5 years			\$0	
Present Value of payment stream					\$593,106	74.9%	\$444,357	\$148,749
					Total Post closure	Percent Land	Total Land	Total Water

WATER TREATMENT COSTS

ANNUAL VOLUME OF WATER (m3) _____

Reagent addition rates

Reagent	kg reagent/m3 water	cost in \$/kg, FOB site	Annual reagent cost
H2O2	0.1 kg/m3	1.5	\$0
lime	kg/m3	0.45	\$0
ferric sulphate	kg/m3		\$0
ferrous sulphate	kg/m3		\$0
flocculents	kg/m3		\$0
TOTAL			\$0

Supplies and Labour

power, kW-hr	0 rate, \$/kW-h	\$0
misc. supplies, hoses, tools		\$0
sampling equip.		\$0
equip. maintenance and parts		\$0
water analysis		\$0
reporting		\$0
truck rental		\$0
annual mileage		\$0
road maintenance & snow plowing		\$0
electrician/mechanic for treatment plant		\$0
power supply		\$0
Annual cost		\$0
labor hourly rate	35	
men per day for water treatment work		1
on site, days per year		0
spring/fall maintenance, extra work		0
hours worked per year		0
annual labor cost		\$0
Total, labour and supplies		\$0
TOTAL ANNUAL COSTS, reagents plus labour and supplies		\$0
Average treatment cost, \$/m3		\$0.00

Water analyses	
samples per month	10
analysis cost/sample	100
shipping	200
Total Water Sampling	1200

Site Access	
annual site access cost	
road	\$0
air	\$0
winter road	\$0