# REMEDIATION COSTS ESTIMATE CHIDLIAK PROJECT, NU, SEPTEMBER 2011 (Updated)

## DISCOVERY MINING SERVICES LTD

September 30<sup>th</sup>, 2010

Peregrine Diamonds Remediation Costs Estimate

Att: Shirley Standsfer-Pfister

#### **Sunrise Remediation costs estimate**

Please note this is assuming that the drills and all heavy equipment on site have already been demobilized and the only equipment on site is the Discovery camp. This is just an estimate on the remediation on the Chidliak site. This site can be cleaned up during the summer but demobilization will be during the winter on skies

1) Discovery crew costs	
Estimate14 days at 1600.00 a day	\$ 22,400.00
2) Mob Cost of Discovery Crew	
Estimate 3 tickets (\$ 2,200.00)	\$ 6,600.00
Estimate 6 rooms and food (\$350.00)	\$ 2,100.00
3) Grocery costs	\$ 2,200.00
4) Communications and equipment Chainsaws/MSat/Radios	\$ 1,500.00
5) Helicopter time (\$2000.00)	
Fuel on site / Estimate 10 hours	\$ 20,000.00
6) Estimate Flights (30x \$3500.00)	\$105,000.00
7) Estimate 30 drums on site (6 trips)	\$ 21,000.00
Total Estimate	\$ 162,000.00

Estimated remediation costs for <u>SUNRISE CAMP</u> and environs, Chidliak Property, by professional camp cleanup and removal specialists, Discovery Mining Services. Cleanup of this winter-access-only camp assumes that, due to significant costs of removing all materials by air, that large or bulky items, such as plywood and other inert items, can be neatly stockpiled at completion of the summer cleanup, then removed to Iqaluit in winter by the existing community winter trail or Peregrine's 2012 winter-access trail to Discovery Camp. NOTE: Cost of fixed-wing flights would be reduced by approximately 30% if Peregrine is given permission to burn clean wood (such as tent floors and supports) on site; otherwise, 30 fixed-wing trips are estimated above for removal with no burning of wood.

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#### Peregrine Discovery Camp Remediation costs estimate

Please note this is assuming that the drills and all heavy equipment on site have already been demobilized and the only equipment on site is the Peregrine camp. Helicopter time is an estimate and I am assuming we are just using the helicopter around camp and fuel is on site for the Helicopter This is just an estimate on the remediation on the Discovery Camp site. Discovery camp can be cleaned up and removed during the summer.

\$ 14,400.00
\$ 2,100.00
\$ 1,800.00
\$ 1,500.00
\$ 10,000.00
\$ 70,000.00
\$ 14,000.00
\$ 113,800.00

Estimated remediation costs for <u>DISCOVERY CAMP</u> environs, Chidliak Property, by professional camp cleanup and removal specialists, Discovery Mining Services. Discovery Camp has a natural cobble airstrip which makes the camp usable for summer operations and in winter, if strip has had regular grooming by camp forces. NOTE: Cost of fixed-wing flights would be reduced by approximately 30% if Peregrine is given permission to burn clean wood (such as tent floors and supports) on site; otherwise, 20 fixed-wing trips are estimated above for removal with no burning of wood.

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## Peregrine New 3<sup>rd</sup> Camp Remediation costs estimate

Please note this is assuming that the drills and all heavy equipment on site have already been demobilized and the only equipment on site is the Peregrine camp. Helicopter time is an estimate and I am assuming we are just using the helicopter around camp and fuel is on site for the Helicopter. This is just an estimate on the remediation of the new 20 person camp site. The new camp can be cleaned up and removed during the summer.

1) Discovery crew costs Estimate 8 days at 1600.00 a day	\$ 12,800.00
2) Mob Cost of Discovery Crew Estimate 6 rooms and food (\$350.00)	\$ 2,100.00
3) Grocery costs	\$ 1,800.00
4) Communications and equipment Chainsaws/ MSat /Radios	\$ 1,500.00
5) Helicopter time (\$2000.00) Fuel on site / Estimate 5 hours	\$ 10,000.00
6) Estimate Flights (14x \$4500.00)	\$ 63,000.00
7) Estimate 20 drums on site (4 trips)	\$ 18,000.00
Total Estimate	\$ 93,000.00

Estimated remediation costs for new <u>THIRD CAMP</u> environs, Chidliak Property, by professional camp cleanup and removal specialists, Discovery Mining Services. It is assumed that only one other camp besides Sunrise and Discovery will require dismantling. Natural completion of field work may lead to the closure of either Aurora or the new CH-6 Temporary Camp on regular Discovery Mining service schedule and without a separate dismantling/removal event. Either of the "third camps" would be accessible via helicopter ferry flights from either Discovery or Sunrise camps; in winter, CH-6 camp would be easily accessible for removal via the winter-access trails. NOTE: Cost of fixed-wing flights would be reduced by approximately 30% if Peregrine is given permission to burn clean wood (such as tent floors and supports) on site; otherwise, 14 fixed-wing trips are estimated above for removal with no burning of wood.

EST. GRAND TOTAL: DISCOVERY MINING SERVICES = \$368,800.00

#### WATER AND SOIL SAMPLING ESTIMATES AT CLOSURE

### (EBA ENGINEERING LTD. AND ALS ENVIRONMENTAL LABORATORY)

(Note: Estimates are based on prices likely to be in effect in 2012)

1) Water Sampling - Camps:

Estimates 3 sites/camp x 3 camps plus 1 duplicate = 7 water-quality grab samples

Cost for analysis (parameters under existing licence) at \$305 each:

\$2,135.00

2) Water Sampling - Drill Sites:

Estimates 2 drillsites (2 samples) plus 2 duplicates = 4 water-quality grab samples

Cost for analysis (BTEX + F1-F4) at \$150 each:

\$600.00

3) Water Sampling - Potable:

Estimates 12 samples/camp x 3 camps = 36 camp-water samples

Cost for analysis (faecals, total coliforms, *E. coli*) at \$30 each:

\$1,080.00

4) Soil Sampling - Drill Sites:

Estimates 4 locations/camp x 3 camps (12 samples) plus 1 duplicate = 13 soil grab samples

Cost for analysis (BTEX + F1-F4) at \$200 each:

\$2,600.00

5) Shipment of coolers (Canadian North or First Air):

\$600.00

6) EBA Engineering - Sample Collection/Review Analytical Results/Report:

Estimated airfare (to/from EBA office, Yellowknife, ,NT) = \$2100 x return flight:

\$4,200.00

Estimated hotel + meals travelling to/from Igaluit, NU = \$260/trip:

\$520.00

Fee: 1 intermediate scientist for 55 hrs. total at chargeout of \$142/hr.

\$7,810.00

(Note: Time estimate allows for shovel excavation of 2 minor spill sites, re-covering/recontouring with clean material nearby + documenting photos.)

Estimated 1/2 day assistance from Discovery Mining Services

Crew cost of \$1600/day x 50% of day (for expediting, logistics, any manifests, etc.):

\$800.00

Room/board at Discovery Mining Services camp (one of Chidliak camps) for 4 days

Cost estimated at \$200/person x 2 persons (scientist + assistant) for 4 days:

\$800.00

Estimated cost for Igaluit-based enviro-assistant with firearms licence

(Peregrine direct cost at \$300/day x 5 days):

\$1,500.00

Estimated EBA equipment-rental charge:

\$300.00

7) Helicopter cost estimate - wet (same figure as used by Discovery Mining Services):

Cost from centrally-located camp to 2 drillsites, 3 camps, minor holding time (2 hrs.):

\$4,000.00

8) Fixed-wing cost estimate (same figure as used by Discovery Mining Services)

Cost if passage via Kenn Borek - Iqaluit charter, to/from Discovery Camp, 2 flights:

\$9,000.00

TOTAL: \$35,945.00

ASSUMPTION 1: Quote assumes 1 camp is operational by Discovery Mining Services, to allow overnight at camp (room/board) for 4 days.

ASSUMPTION 2: Quote assumes availability to share fixed-wing space with Discovery Mining Services.

ASSUMPTION 3: Estimate assumes that not all camps will require a separate sampling event apart from regular

Chidliak water-quality sampling and environmental-studies schedule.