



## **Abandonment & Restoration Plan**

Roche Bay plc.  
Roche Bay, Nunavut

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## **Preamble**

This Abandonment and Restoration Plan is effective from June 1, 2006, to December 31, 2006 and applies to Roche Bay Magnetite Project operated by Roche Bay plc near Hall Beach, Nunavut, approximately latitude 68 degrees, 26 minutes and longitude 82 degrees, 46 minutes, see attached map. The camp will be constructed to support a drilling program once the appropriate approvals, permits and licenses are in place. A DIAND Land Use Permit and NWB Water License have been applied for.

## **Introduction**

The following plan applies to exploration activities undertaken at Roche Bay, Nunavut. Upon completion of the land use operation and exploration, the following steps and procedures will be implemented to allow proper abandonment and reclamation of the area.

Our activities will be twofold. Roche Bay plc will be conducting systematic drilling on lease numbers 2952-2953. These lease numbers are also known as the Adler, B and C ore bodies and the area totals 4228 acres. We intend to drill approximately 45 holes to an average depth of 150 meters. Our goal is to extract between 6,000-10,000 meters of core samples for process testing. This work will require a seventeen week time period, with a maximum total of 10 people involved in the activities. Primary access to the site will be via L382G Hercules plane from Churchill and Yellowknife to Roche Bay. This plane will fly in the drill rig, camp equipment and fuel and food. There will be two such trips during the drill program.

Ground transportation will make use of an ATV with a trailer as well as a snowmobile using the old haul roads going from the airstrip to the camp site and ore bodies. Personnel will fly via commercial airline to Hall Beach and a Bombardier personnel carrier will transport them from Hall Beach to Roche Bay. Depending on equipment availability, we will rent the ground transportation vehicles from the local Hall Beach community.

In addition to the diamond core drilling, we will also be doing clean up work at the old Borealis site. Access to the old Borealis site is possible using the old haul roads. The ATV with trailer and snowmobile will be used to haul from the site to the airstrip.

We will be setting up a ten person camp on the C ore body. It will be a Weatherhaven camp with seven modules which we will be taking back with us upon completion of the project. The location of the site was selected because of its proximity to the primary ore body to be drilled (the C deposit).

## History

Under the previous management, the restoration of the old Borealis site, which was used in the early 80s for exploration, was never fully undertaken after abandonment; however the current management intends to make it their first priority to restore the old site before commencing the setup of a new camp. Current management will also ensure that proper abandonment and restoration procedures are followed at the end of its activities.

## Schedule

The restoration of the old Borealis campsite should not take more than two days. In August 2005, a visit to the site included the pilling and sorting of the waste still remaining, and an inventory was taken (see attached photos). It is our plan to contract out the hauling of the empty oil barrels that are still on site to workers in Hall Beach while the site is still accessible by snowmobile during our next town meeting in April.

The abandonment and restoration of the campsite at the end of our drilling in December should take no more than 5 days to complete. The plan will be applied with the help of the project personnel under the supervision of the field supervisor.

## Infrastructure

- Three sleep tents
- One kitchen tent
- One office tent
- One dry room
- One outhouse
- One generator
- One fuel cache with Spill Kit
- One burn barrel
- One core shack

## Seasonal Abandonment and Restoration Plan

### Buildings and Contents

All tent structures will be secured for the winter and all equipment like stoves, mattresses, showers etc... will be left on site. The camp will be secured and no food (including canned food) will be left onsite. All remaining food will be donated to the Hall Beach community.

### Drilling Locations

Any drill equipment will be dismantled, packaged and stored along with its ancillary equipment and rods. The drill will be left on solid ground until next season. All drill locations will be inspected immediately upon completion of each drill hole. All waste will be collected and taken to camp via ATV or snowmobile for incineration or removal to an approved disposal location. All sumps will be backfilled and each drill collar will cut off to ground level. The sites will be inspected for soil contamination.

Photographs of each drill site will be taken upon completion of clean up at each site.

### Fuel Storage

A thorough inspection of full fuel drums as well as an inventory of empty fuel drums will be made prior to camp abandonment. Empty drums will be backhauled to Hall Beach for proper disposal during the course of the program. The soil of the areas will be inspected for contamination.

### Waste

#### *Combustible waste*

All combustible waste will be incinerated throughout the course of the program. Ashes will be collected and disposed of in a landfill site in Hall Beach and the burn barrel stored over the winter. Once the camp is closed, all remaining combustible waste will be burned and the incinerator will be dismantled and stored. The soil will be inspected for contamination.

#### *Non-combustible waste*

Non-combustible waste will be hauled out to Hall Beach throughout the course of the program for proper disposal, or be flown out depending on what transportation methods are available at the time. All carriers and receivers of this material will be informed of the need to register with the Government of Nunavut, Department of Environment as well as having proper documentation in the form of a waste manifest.

### Water System

Pump, tanks and hoses will be drained, dismantled, packaged and stored. Hoses will be rolled and stored.

### Contamination Clean Up

Any soil at camp or at the drill sites that has become contaminated will be treated as per the “Oil and Hazardous Waste Materials Spill Contingency Plan”. Before and after photographs will be taken to document the contamination and the clean up.

### Documentation and Inspection

Equipment and buildings left on site will be inventoried. A complete inspection of all disturbed areas (drill sites, camp and fuel caches) will be conducted prior to seasonal closure with a full inventory taken at each location. As well, photographs will be taken to document each work area and campsite before, during and after the project is complete.

## **Final Abandonment and Restoration Plan**

### **Buildings and Contents**

All reusable equipment like tents, tent frames, stoves, mattresses, showers etc... will be dismantled, packaged and removed from site to Hall Beach for general storage. Wooden structures will be dismantled, moved and stored. Nails, screws, anchors and other such parts will be recovered and kept for next season where possible, otherwise packaged and flow out to an approved municipal discharge.

### **Drilling Locations**

Any drill equipment will be dismantled, packaged and moved to its next location along with its ancillary equipment and rods. All drill locations will be inspected immediately upon completion of each drill hole. All waste will be collected and taken to camp via ATV or snowmobile for incineration or removal to an approved disposal location. All sumps will be backfilled and each drill collar will cut off to ground level. The sites will be inspected for soil contamination.

Photographs of each drill site will be taken upon completion of clean up at each site.

### **Fuel Storage**

All fuel drums will be removed and the areas where there have been fuel caches will be thoroughly inspected. Any contaminated soil will be treated according the “Oil and Hazardous Material Spill Contingency Plan” and photos will be taken of all caches to include in the final report.

### **Waste**

#### *Combustible waste*

Once the camp is closed, all remaining combustible waste will be burned and the incinerator will be dismantled and moved for storage in Hall Beach. The soil will be inspected for contamination.

#### *Non-combustible waste*

Non-combustible waste will be backhauled to Hall Beach throughout the course of the program for proper disposal, or be flown out depending on what transportation methods are available at the time. All carriers and receivers of this material will be informed of the need to register with the Government of Nunavut, Department of Environment as well as having proper documentation in the form of a waste manifest.

### **Water System**

Pump, tanks and hoses will be drained, dismantled, packaged, moved and stored. Hoses will be rolled, moved and stored.

### **Contamination Clean Up**

Any soil at camp or at the drill sites that has become contaminated will be treated as per the “Oil and Hazardous Waste Materials Spill Contingency Plan”. Before and after photographs will be taken to document the contamination and the clean up.

### Documentation and Inspection

A complete inspection of all disturbed areas (drill sites, camp and fuel caches) will be conducted prior to seasonal closure with a full inventory taken at each location. As well, photographs will be taken to document each work area and campsite before, during and after the project is complete. All appropriate agencies will be contacted once the final clean up is complete and we will organize a final site inspection visit with community representatives, Land Use Inspectors and in collaboration with the Nunavut Water Board staff, if requested.

Topographic map of Hall Lake, Alaska, showing various features and deposits. The map includes contour lines, a grid, and labels for 'Adler and B Deposits', 'Camp site, Borealis clean up', 'C Deposit', 'Old haul roads', 'Airstrip', and 'Dock site, some Borealis clean up'. A scale bar and a north arrow are also present.

Map details:

- Scale:** 1:50,000
- Projection:** UTM
- Zone:** 18N
- Grid:** UTM
- Contour Interval:** 20 feet
- Map Scale:** 1 inch = 1 mile
- Map Title:** HALL LAKE, ALASKA
- Map Number:** 47 A
- Map Edition:** 1
- Map Date:** 1988
- Map Author:** U.S. Geological Survey
- Map Source:** Aerial photography, 1988
- Map Features:**
  - Adler and B Deposits
  - Camp site, Borealis clean up
  - C Deposit
  - Old haul roads
  - Airstrip
  - Dock site, some Borealis clean up





## Photos of Borealis Clean Up To Be Done



