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NUNAVUT IMALIRIYIN

KATIMAYINGI

EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: ROCHE BAY PLC Licence No: _____
(For NWB Use Only)

ADMINISTRATIVE INFORMATION

1. Environment Manager: Janet Levine Tel: 503-621-3286 Fax: 503-621-3425
E-mail: jsl@rochebay.com.
2. Project Manager: Janet Levine Tel: 503-621-3286 Fax: 503-621-3425
E-mail: jsl@rochebay.com
3. Does the applicant hold the necessary property rights?

Yes.
4. Is the applicant an 'operator' for another company (i.e., the holder of the property rights)?
If so, please provide letter of authorization.

No.
5. Duration of the Project
☒ Annual
☐ Multi Year:
 If Multi-Year indicate proposed schedule of on site activities
 Start: _____ Completion: _____

CAMP CLASSIFICATION

6. Type of Camp
☐ Mobile (self-propelled)
☒ Temporary
☐ Seasonally Occupied: _____
☐ Permanent
☐ Other: _____

7. What is the design population of the camp and the maximum population expected on site at one time? What will be the fluctuations in personnel?

There will be 1 driller, 2-3 Inuit helpers, 1 geologist, Benjamin Cox, President of Roche Bay plc and Janet Levine, Environmental Manager and Project Coordinator. There will be no more than 3-4 consultants who will fly in periodically for a day or so. The maximum population expected at the site at one time would be 10 people.

8. Provide history of the site if it has been used in the past.

In the early 80s this lease was drilled by Borealis Exploration.

CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies.

The camp will be located on a banded magnetite iron formation more than 300m from any water body. Except for the eastern extremity, the area is comprised of an Archaean granite-greenstone terrain within the Churchill Structural Province of the Canadian Shield. In most areas, the outcrop is fresh and well exposed in the barren glaciated Arctic terrain and as a result, geological features are readily observed. Narrow elongated belts of metavolcanic and metasedimentary rocks cut across the peninsula in the northeasterly direction.

10. How was the location of the camp selected? Was the site previously used? Was assistance from the Regional Inuit Association Land Manager sought? Include maps and/or aerial photographs.

The location of the site was selected because of its proximity to the ore body to be drilled (the C deposit). The site has been used in the early 80s when initial exploratory drilling had been done. Assistance from the Regional Inuit Association Land Manager was not sought.

11. Is the camp or any aspect of the project located on:

<input checked="" type="checkbox"/> Crown Lands	Permit Number: <u>Lease #2953</u> Expiry Date: <u>July 23, 2021</u>
<input type="checkbox"/> Commissioners Lands	Permit Number (s)/Expiry Date: _____
<input type="checkbox"/> Inuit Owned Lands	Permit Number (s)/Expiry Date: _____

12. Closest Communities (distance in km):

Hall Beach 60km.

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?

As of yet, no one has been notified about the proposed work however we plan on doing 3 days of community meetings in Hall Beach before beginning to work.

14. Will the project have impacts on traditional water use areas used by the nearby communities?
No.

Will the project have impacts on local fish and wildlife habitats?

No.

PURPOSE OF THE CAMP

15. ☒ Mining
☐ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.)
(Omit questions # 16 to 21)
☐ Other _____ (Omit questions # 16 to 22)
16. ☐ Preliminary site visit
☐ Prospecting
☐ Geological mapping
☐ Geophysical survey
☒ Diamond drilling
☐ Reverse circulation drilling
☐ Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)
☐ Other: _____
17. Type of deposit:
- ☐ Lead Zinc
 - ☐ Diamond
 - ☐ Gold
 - ☐ Uranium
 - ☒ Other: Magnetite

DRILLING INFORMATION

18. Drilling Activities
- ☒ Land Based drilling
 - ☐ Drilling on ice

19. Describe what will be done with drill cuttings?

The drill cuttings will be settled out in containment troughs and will be filtered out from any water discharge.

20. Describe what will be done with drill water?

Drill water will be recirculated with ideally 100% reusage. After drilling is completed the water will be settled of all total suspended solids and then released.

21. List the brand names and constituents of the drill additives to be used? Includes MSDS sheets and provide confirmation that the additives are non-toxic and biodegradable.

No drill additives will be used.

22. Will any core testing be done on site? Describe.

No core testing will be done on site.

SPILL CONTINGENCY PLANNING

23. Does the proponent have a spill contingency plan in place? Please include for review.

Yes, see attached "Oil and Hazardous Material Spill Contingency Plan".

24. How many spill kits will be on site and where will they be located?

There will be 2 spill kits available on site. One will travel with the oil drums and the other will be at the camp where the gasoline is stored.

25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets.

We will store ten 208-litre barrels of gasoline in oil drums and 25 litres of standard automotive engine oil. Attached are the MSDS sheets.

WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

There is a creek that bisects the Core body and a lake to the west of the Core body. The lake will be the source of the local water supply.

27. Estimated demand (in L/day * person):

- ☒ Domestic Use: 100L per day Water Source: Lake
- ☒ Drilling Units: 378 L Water Source: Lake
- ☐ Other: _____ Water Source: _____

28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? Describe.

The intake for camp operations will be a 20L/minute hand pump with portable containers. The intake will be equipped with a mesh screen to prevent fish entrapment.

29. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency?

Drinking water will be flown in. No local water will be sourced.

30. Will drinking water be treated? How?

Water will be flown in.

31. Will water be stored on site?

There will be approximately 378 litres of water which will be stored in troughs for drilling.

WASTE TREATMENT AND DISPOSAL

32. Describe the characteristics, quantities, treatment and disposal methods for:

☒ Camp Sewage (blackwater)

Sewage for seven people for 3 weeks. It will be disposed of in a sump more than 200m from any creek or water body.

☒ Camp Greywater

Sewage for seven people for 3 weeks. It will be disposed of in a sump more than 200m from any creek or water body.

☐ Solid Waste

☒ Bulky Items/Scrap Metal

These will be disposed of in the Hall Beach dump.

☒ Waste Oil/Hazardous Waste

This will be flown out of the site and shipped South of the sealift.

☒ Empty Barrels/Fuel Drums

These will be cleaned, flattened and disposed in the Hall Beach dump.

☐ Other:

33. Please describe incineration system if used on site. What types of wastes will be incinerated?

There will be no incineration system on site.

34. Where and how will non-combustible waste be disposed of ? If in a municipality in Nunavut, has authorization been granted?

Non-combustible waste will be disposed of at the Hall Beach dump. No authorization has been acquired as of yet.

35. Describe location (relative to water bodies and camp facilities) dimensions and volume, and freeboard for sumps (if applicable).

The sump will be located at least 200m from any water body and the camp. The dimensions will be 1mx2m with a volume under 200L. There will be a minimum of 1m freeboard.

36. Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency?

No.

OPERATION AND MAINTENANCE

37. Have the water supply and waste treatment and disposal methods been used and proven in cold climate? What known O&M problems may occur? What contingency plans are in place?

The water supply and waste treatment and disposal methods have been used and proven in cold climate. There are no known O&M problems that may occur. Since the planned water use is relatively minor, no contingency plan has been implemented.

ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site.

Restoration of the old Borealis camp will be done. All equipment and supplies will be removed during camp tear-down.

BASELINE DATA

39. Has or will any baseline information be collected as part of this project? Provide bibliography.

☒ **Physical Environment (Landscape and Terrain, Air, Water, etc.)**

Regional Lake Sediment And Water Geochemical Reconnaissance Data 1977

Initial Environmental Evaluation April 5, 1981

Prepared by Borealis Exploration Ltd. (3.7MB)

Addenda to the Initial Environmental Evaluation June 1981-December 1982

Prepared by Borealis Exploration Ltd. (4.23MB)

National Geochemical Reconnaissance, early 1980s

Geological Survey of Canada

Preliminary Report On The Hydrology of the Roche Bay Area January 1984

Prepared by Borealis Exploration Ltd. (0.75MB)

☒ **Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic Organisms, etc.)**

Preliminary Assessment of Potential Environmental Effects of the Borealis Iron Ore Development Proposal on Birds of Melville Peninsula, July 1983

Prepared by Peter N. Boothroyd, Canadian Wildlife Service

Mammals of the Melville Peninsula and the Possibility of Their Disturbance by the Proposed Mine and Roche Bay, early 1980s

☒ **Socio-Economic Environment (Archaeology, Land and Resources Use,**

The Socio-Economic Impacts of the Roche Bay Magnetite Project January 1983

Prepared by Borealis Exploration Ltd. and its consultants

☒ **Demographics, Social and Culture Patterns, etc.)**

The Socio-Economic Impacts of the Roche Bay Magnetite Project January 1983

Prepared by Borealis Exploration Ltd. and its consultants

☐ **Other: For any other baseline information see the Project Library at**

<http://www.rochebay.com>

REGULATORY INFORMATION

40. Do you have a copy of

☒ Article 13 - Nunavut Land Claims Agreement

☒ NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants

☒ NWB - Interim Rules of Practice and Procedure for Public Hearings

☒ NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT

☒ NWTWB - Guidelines for Contingency Planning

☒ DFO - Freshwater Intake End of Pipe Fish Screen Guideline

☒ Fisheries Act - s.35

☒ RWED - Environment Protection- Spill Contingency Regulations

☒ Canadian Drinking Water Quality Guidelines

☒ Public Health Act Camp Sanitation Regulations

☒ Public Health Act Water Supply Regulations

☒ Territorial Land Use Act and Regulations

You should consult the above document, guidelines, and legislation for compliance with existing regulatory requirements.