

P.O. Box 119

GJOA HAVEN, NT XOE 1JO kNK5 wmoEp5 vtmpq

TEL: (867) 360-6338

FAX: (867) 360-6369

NUNAVUT WATER BOARD NUNAVUT IMALIRIYIN KATIMAYINGI

## EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: Full Metal Minerals Ltd. Licence No: (For NWB Use Only)					
ADMINISTRATIVE INFORMATION  (For NWB Use Only)					
1. Environment Manager: <u>Darcy Baker</u> Tel: <u>604-688-9806</u> Fax: <u>604-688-0235</u> E-mail: <u>darcyb@equityeng.bc.ca</u>					
Project Manager: <u>Darcy Baker</u> Tel: <u>604-688-9806</u> Fax: <u>604-688-0235</u> E-mail: <u>darcyb@equityeng.bc.ca</u> Does the applicant hold the necessary property rights?  Yes					
<ol> <li>Is the applicant an 'operator' for another company (i.e., the holder of the property rights)?</li> <li>If so, please provide letter of authorization.</li> <li>Yes</li> </ol>					
Duration of the Project  [ ] Annual [ X ] Multi Year:  If Multi-Year indicate proposed schedule of on site activities  Start: March 1, 2005 Completion: February 28, 2007					
CAMP CLASSIFICATION					
[ ] Mobile (self-propelled)  [X] Temporary  [ ] Seasonally Occupied:  [ ] Permanent  [ ] Other:					
7. What are the design population of the camp and the maximum population expected on site at one time? What will be the fluctuations in personnel?					

site at one time is twelve people. 8. Provide history of the site if it has been used in the past.

Page 1 of 8 October 1998

The camp will be designed to accommodate 9 to 12 people and the maximum expected on

This particular site has not been utilized in the past, however previous exploration programs utilized a camp located north of the proposed site, as indicated on the plan map. The previously-utilized camp will not be suitable for the proposed activities due to its distance from a suitable lake for a winter airstrip.

#### CAMP LOCATION

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

The camp will be located greater than 30 metres from the shore of an un-named lake, as indicated on the plan map. This lake, when frozen will be cleared and used as an airstrip for fixed wing aircraft. It lies in an area of tundra with low scrub.

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 site was chosen for its proximity to a lake large enough and properly-oriented with respect to prevailing winds, for its use as an airstrip. The site was also chosen for its relative proximity to the area of work, in this case exploratory diamond drilling.

11. Is the camp or any aspect of the project located on:			
	[ ] Crown Lands	Permit Number (s)/Expiry Date:	
	[ ] Commissioners Lands	Permit Number (s)/Expiry Date:	
	[X] Inuit Owned Lands	Permit Number (s)/Expiry Date: in process	

12. Closest Communities (distance in km):

Kugluktuk, approximately 160 kilometres. Cambridge Bay, approximately 310 kilometers.

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

No. Consultation with nearby communities and interested parties is planned to take place in the winter of 2004-05

14. Will the project have impacts on traditional water use areas used by the nearby communities? Will the project have impacts on local fish and wildlife habitats?

There are no known communities in the area of the project's activities. The project has been designed to minimize impacts on local fish and wildlife habitats, and these impacts are believed to be insignificant.

## PURPOSE OF THE CAMP

15. Mining

October 1998

		O Tourism	(hunting, fishing, wildlife observation, adventure/expedition, etc.) (Omit questions # 16 to 21)
		OOther	(Omit questions # 16 to 22)
	16.	<ul> <li>Property</li> <li>G</li> <li>D</li> <li>R</li> <li>E</li> </ul>	reliminary site visit rospecting reological mapping reophysical survey riamond drilling reverse circulation drilling valuation Drilling/Bulk Sampling (also complete separate questionnaire) other:
	17.	Type of depos	Sit:  O Lead Zinc O Diamond O Gold O Uranium O Other:
DRI	LLING	INFORMATIO	ON
18.	Drilli	ng Activities	

19. Describe what will be done with drill cuttings?

Drill cuttings from holes collared on lake ice will be collected and backhauled to an approved waste disposal facility. Drill cuttings from holes collared on land will be deposited to sumps or natural depressions (where permafrost or winter conditions are a factor) to prevent discharge to bodies of water and where they can be settled and filtered out. These sumps will be backfilled, re-graded and re-seeded upon completion of the program.

Land Based drilling

O Drilling on ice

- 20. Describe what will be done with drill water?
- a) Drill holes collared on lake ice: Drill water from which drill cuttings have been filtered out will be discharged returned to the lake.
- b) Drill holes collared on land: Drill water will be deposited into sumps or natural depressions (where permafrost or winter conditions are a factor) to prevent discharge to bodies of water and to settle out cuttings and subsequently discharged to the surface.
- 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.

Big Bear Diamond Drill Rod Grease (see attached MSDS data sheet)
Cal-Seal (EA-2) (see attached MSDS data sheet)
550X Polymer (see attached MSDS data sheet)
Linseed Soap (see attached MSDS data sheet)
Lubtub (see attached MSDS data sheet)

October 1998

Salt (CaCl), not toxic and biodegradable

Will any core testing be done on site? Describe.

The only core testing to be carried out on site will consist of descriptive and geotechnical drill logging and sampling where spilt core will be shipped to an analytical laboratory for geochemical assaying.

### SPILL CONTINGENCY PLANNING

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

Yes.

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

Two spill kits will be on site; one each at the camp and the fuel cache.

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

A total of approximately 120 drums (24,000 litres) of diesel fuel, 8 drums (1,600 litres) of gasoline, 32 drums (6,400 litres) of Jet B and 80 tanks (3,500 kg) of propane will be stored in two caches. Each fuel cache will consist of an impermeable berm that houses the fuel, and drill additives will be at the camp fuel cache. The fuel berms will be designed to contain 110% of the total fuel capacity of the cache. A maximum of approximately 575 litres of drill additives and 150 litres of engine lubricants will be stored on site. In addition, approximately 5670 kilograms of salt (CaCl) (to be used as an additive to prevent drill water from freezing) will be stored on site.

## WATER SUPPLY AND TREATMENT

Describe the location of water sources.

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

Water for the camp will be sourced from the un-named lake from which it lies adjacent. Water for the drill will be sourced from the nearest lake or creek with sufficient flow for the drill's supply pump.

	Other:		Water Source:	
wit	h sufficient flow	to drill		
0	<b>Drilling Units:</b>	111,000 litres per	day maximum	Water Source: Nearest lake or creek
0	Domestic Use:	50 litres/day per	person; 600 litres/day	_ Water Source:_Un-named lake at camp
	. Estillated C	in in any	person).	

October 1998 Page 4 of 8

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

A small Honda water pump will be used to regularly fill a holding tank for camp operations. The intake for this pump will be equipped with a screen to prevent the entrapment of fish as per Department of Fisheries guidelines.

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

No.

30. Will drinking water be treated? How?

If necessary, drinking water will be treated by chlorination, using low concentrations of bleach.

31. Will water be stored on site?

Water will be stored in a holding tank of approximately 1,500 to 2,300 litres (300 to 500 gallons).

## WASTE TREATMENT AND DISPOSAL

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

O Camp Sewage (blackwater)

In the winter, camp sewage will be deposited in a Pacto toilet that collects sewage that will be backhauled to appropriate waste disposal facilities in Yellowknife or Cambridge Bay. In the summer, camp sewage will be deposited in a privy pit that will be regularly treated with lime and backfilled, re-graded and re-seeded upon completion of the program.

O Camp Greywater

In the winter, camp greywater will be deposited to a natural depression that prevents discharge to bodies of water for settling. This depression will be re-seeded upon completion of the program. Camp greywater will be deposited to a series of sumps for settling and filtering prior to discharge to surface. The sumps will be covered and backfilled, re-graded and re-seeded upon completion of the program.

O Solid Waste

Combustible solid waste will be burned in a dedicated incinerator.

O Bulky Items/Scrap Metal

Bulky items and scrap metal will be back hauled to disposal facilities in Yellowknife or Cambridge Bay.

Waste Oil/Hazardous Waste

Waste oil will be incinerated with combustible waste in the dedicated incinerator. Hazardous waste will be safely contained and backhauled for disposal in appropriate facilities in Yellowknife or Cambridge Bay.

Empty Barrels/Fuel Drums

Empty fuel drums from this program will be backhauled to Yellowknife for re-use.

O Other:

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

An empty 45 gallon fuel drum will be converted to a dedicated burn barrel. A screen will be utilized for ash removal. Combustible waste will be incinerated.

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 backhauled for disposal in landfills in Yellowknife and Cambridge Bay.

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

The greywater disposal facilities will be located >30 metres from any body of water and away from walkways between camp facilities. For the summer program(s), two greywater disposal sumps will be established each with dimensions of at least 100 by 100 by 100 centimetres and a freeboard of approximately 20 centimetres and effective volumes of 800 litres each for a total of 1600 litres.

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

No.

#### OPERATION AND MAINTENANCE

October 1998 Page 6 of 8

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 primary problems that may be encountered with regard to greywater disposal would be overfilling of the sumps. This may be due to insufficient capacity or location within an area of poor drainage, for instance in an area of permafrost. Every reasonable effort will be expended to locate the greywater sumps in areas of sand or gravel to improve drainage. Contingency plans to prevent over-filling include the excavation of additional sump(s).

In the winter a natural depression will be used to prevent greywater from entering bodies of water. The camp site will be located adjacent to a depression of sufficient volume to contain the volume of greywater generated by this program.

### ABANDONMENT AND RESTORATION

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

Non-combustible waste will be backhauled to appropriate waste disposal facilities and empty fuel drums from this program will be backhauled to fuel bulk plants for re-use throughout the course of the program. If possible, empty fuel drums from previous programs carried out in the 1980's by previous operators will also be backhauled for re-use or crushed and backhauled for disposal.

Upon completion of this program all equipment and fuel drums will be removed from the site. All drill and greywater disposal areas, sumps, and pit privies will be backfilled, re-graded and re-seeded with species native to the area. Wood-framed structures for tents will be dismantled and burned. Incinerator barrels and their residue will be backhauled to appropriate waste disposal facilities.

#### BASELINE DATA

- 39. Has or will any baseline information be collected as part of this project? Provide bibliography.
  - O Physical Environment (Landscape and Terrain, Air, Water, etc.)
  - O Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic
  - O Organisms, etc.)
  - O Socio-Economic Environment (Archaeology, Land and Resources Use,
  - O Demographics, Social and Culture Patterns, etc.)
  - O Other:

#### REGULATORY INFORMATION

- 40. Do you have a copy of
  - O / Article 13 Nunavut Land Claims Agreement

October 1998 Page 7 of 8

# for Applicants

- O NWB Interim Rules of Practice and Procedure for Public Hearings
- NWTWB Guidelines for the Discharge of Treated Municipal Wastewater in the NWT
- O /NWTWB Guidelines for Contingency Planning
- DFO Freshwater Intake End of Pipe Fish Screen Guideline
- O /Fisheries Act s.35
- & RWED Environment Protection- Spill Contingency Regulations
- O Canadian Drinking Water Quality Guidelines
- Public Health Act Camp Sanitation Regulations
- O 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.

October 1998