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**Water Licence Application  
Supplementary Questionnaire  
for Advanced Exploration  
(Underground drilling, bulk sampling, etc.)**

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# SECTION 1 :

## GENERAL

1. Applicant \_\_\_\_\_  
(Company, corporation, owner)  
\_\_\_\_\_  
(Postal address)  
\_\_\_\_\_  
(Telephone number) (Fax)  
\_\_\_\_\_  
(E-Mail)

Corporate Address (If different from above)

\_\_\_\_\_  
(Corporate Office Address)  
\_\_\_\_\_  
(Telephone number) (Fax)  
\_\_\_\_\_  
(E-Mail)

Project Name \_\_\_\_\_

Location \_\_\_\_\_

Closest Community \_\_\_\_\_

Latitude/Longitude \_\_\_\_\_

Show the location of the project on a general location map.

2. Environmental Manager \_\_\_\_\_  
(Name) (Telephone No.)

or Project Manager \_\_\_\_\_  
(Title)

3. Indicate the status of the exploration activity on the date of application.  
(Check the appropriate space.)

Design \_\_\_\_\_  
Under construction \_\_\_\_\_  
In operation \_\_\_\_\_  
Suspended \_\_\_\_\_  
Care and Maintenance \_\_\_\_\_  
Abandoned \_\_\_\_\_

4. If a change in the status of the exploration activity is expected, indicate the nature and anticipated date of such change.

5. Indicate the present (or purposed) schedule for the exploration activity.

Hours per week \_\_\_\_\_  
Days per week \_\_\_\_\_  
Weeks per year \_\_\_\_\_  
Number of employees \_\_\_\_\_  
Number of Inuit employees \_\_\_\_\_

6. Estimate the term (life) of the exploration activity.

\_\_\_\_\_ (Months / Year)

7. How will the project effect the traditional uses on Inuit Owned Lands?





18. If “YES” above, indicate the name of the water body, the total volume of water to be discharged and the chemical characteristics of the water.

Water body (if unnamed give Latitude/Longitude) \_\_\_\_\_

Total volume \_\_\_\_\_ cubic metres

Receiving Watercourse \_\_\_\_\_

Dewatering flow rate into above \_\_\_\_\_ cubic metres / sec

Chemical characteristics of discharge:

T/Pb	_____ mg/L	Total Ammonia	_____ mg/L
T/Cu	_____ mg/L	Suspended solids	_____ mg/L
T/Al	_____ mg/L	Specific conductivity	_____ uhmo/cm
T/HCN	_____ mg/L	pH	_____
T/Hg	_____ mg/L		
T/Zn	_____ mg/L		
T/Cd	_____ mg/L		
T/As	_____ mg/L		
T/Ni	_____ mg/L		
T/Mn	_____ mg/L		

19. Was (or will) the above discharge (be) treated chemically ?

20. If “YES” above, describe the applied treatment.

21. Briefly describe what will be done with the camp sewage.



25. Describe the geochemical tests which have been (or will be) performed on the ore, host rock, and waste rock to determine their relative acid generation and contaminant leaching potential. Outline methods used (or to be used) and provide test results in an attached report (ie. static tests, kinetic tests.)

26. Estimate the percentage of sulphide in the mineralization:

pyrite	_____
pyrrhotite	_____
pyrite / pyrrhotite mixture	_____
arsenopyrite	_____

**SECTION 3 :**

**EXPLORATION OPERATION**

27. Check off the type (or proposed type) of exploration operation that will be used on the property and briefly describe the method in more detail.

- a) Reverse circulation to obtain bulk sample \_\_\_\_\_
- b) Trenching \_\_\_\_\_
- c) Conventional open pit \_\_\_\_\_
- d) Decline \_\_\_\_\_
- e) Conventional underground \_\_\_\_\_
- f) Strip mining activity \_\_\_\_\_
- g) Other Exploration activity (please explain) \_\_\_\_\_

28. Indicate the size and number of samples that will be obtained.

\_\_\_\_\_ tonnes  
\_\_\_\_\_ number of samples

Please note if smaller samples are to be taken from different areas (note location) to form one large bulk sample.

29. Indicate the present or proposed average rate of exploratory production from all mineralized sources on the property:

\_\_\_\_\_ tonnes ore / day

30. Outline the water usage (or proposed water usage) in the exploration activity, indicate the source and volume of water for each use.

	<b>Source</b>	<b>Use</b>	<b>Volume (m<sup>3</sup> / day)</b>
1.	_____	_____	_____
2.	_____	_____	_____

31. If applicable, indicate or estimate the volume of natural ground water presently gaining access to the mine workings.

\_\_\_\_\_ m<sup>3</sup> / day

32. If applicable, outline methods used underground or on surface to decrease mine water flow. (For example: recycling)

33. List the brand names and constituents of the drill additives to be used.

#### **SECTION 4 :**

##### **THE MILL OR PROCESSING PLANT**

34. Is there (or will there be) a portable mill processing plant be operating on the property in conjunction with the exploration activity ?
- \_\_\_\_\_ Yes                      \_\_\_\_\_ No
35. If “yes” indicate the proposed point of discharge for the mill or process plant water and the volume of the discharge.
- Point of discharge \_\_\_\_\_
- Volume of discharge \_\_\_\_\_ m<sup>3</sup> / day
36. Attach a copy of the portable mill or processing plant flow sheet. Indicate the points of addition of all the various reagents (chemicals) that are (or will be) used.
37. Indicate the proposed rate of milling.
- \_\_\_\_\_ not applicable (check)    or \_\_\_\_\_ tonnes / day
38. List the types and quantities of all reagents used in the mill or processing plant (in kg/tonne ore milled.)

Reagent: \_\_\_\_\_ Amount in kg/tonne ore milled: \_\_\_\_\_

39. If applicable, is the (proposed) milling circuit based on autogenous grinding ?

Yes \_\_\_\_\_ No \_\_\_\_\_ Partially \_\_\_\_\_

40. Based on present production or bench test results, describe the chemical and physical characteristics of liquid mill or processing plant wastes directed to the tailing deposition area.

T/Cu _____ mg/L	Total Ammonia _____ mg/L
T/Pb _____ mg/L	Suspended solids _____ mg/L
T/Zn _____ mg/L	Specific conductivity _____ uhmo/cm
T/Ag _____ mg/L	pH _____
T/Mn _____ mg/L	Alkalinity _____ CaCO <sub>3</sub> /L
T/Ni _____ mg/L	Hardness _____ mg/L
T/Fe _____ mg/L	Total cyanide _____ mg/L
T/Hg _____ mg/L	Oil and Grease _____ mg/L
T/As _____ g/L	
T/Cd _____ mg/L	
T/Cr _____ mg/L	
T/Al _____ mg/L	

41. Provide a geochemical description of the solid fraction of the tailings.

Cu _____ mg/g	Al _____ mg/g
Pb _____ mg/g	Fe _____ mg/g
Zn _____ mg/g	Hg _____ mg/g
Ag _____ mg/g	Ni _____ mg/g
Mn _____ mg/g	As _____ mg/g
Cr _____ mg/g	CN _____ mg/g
Cd _____ mg/g	

## **SECTION 5 :**

### **THE CONTAINMENT AREAS**

42. What is the (Proposed) method of disposal of the mine water, mill or process plant tailings (ie. sump, subaqueous, surface tailings pond, settling pond) ?
43. Attach detailed scale plan drawings of the proposed (or present) containment area. The drawings must include the following:
- a) details of pond size and elevation;
  - b) details of all retaining structures (length, width, height, materials of construction, etc.);
  - c) details of the drainage basin;
  - d) details of all decant, siphon mechanisms etc., including water treatment plant facilities;
  - e) details with regard to the direction and route followed by the flow of wastes and / or waste water from the area; and
  - f) indicate of the distance to nearby major watercourses.
44. Justify your choice of location for the containment area design by rationalising rejection of other options. Consider the following criteria in your comparisons: subsurface strata permeability, abandonment, recycling/reclaiming waters, and assessment of runoff into basins. Attach a brief summation.

45. The average depth of the existing or proposed containment area is dependent on the volume of water encountered metres.
46. Indicate the total capacity for the existing or proposed containment area by using water balance and stage volume calculations and curves. (Attach a description of inputs and outputs along with volume calculations.)
47. Has any evaporation and/or precipitation data been collected at the site ? \_\_\_\_\_ if so, please include the data.
48. Will the present or proposed containment area contain the entire production from the mill or processing plant complex for the life of the project ?
49. Will the proposed tailings deposition area engulf or otherwise disturb any existing watercourse?



54. Name the first major watercourse the discharge flow enters after it leaves the area of company operations.

## **SECTION 7 :**

### **ENVIRONMENTAL MONITORING PROGRAM**

55. Has Traditional Knowledge in the area been considered? If so, how? If not, why not?
56. Has any baseline data been collected for the main water bodies in the area prior to development ?
57. If “Yes”, include all data gathered on the physical, biotic and chemical characteristics at each sampling location. Identify sampling locations on a map.

58. Provide an inventory of hazardous materials on the property and storage locations.

59. Provide a conceptual abandonment and restoration plan for the site, detailing the costs to carry out the plan, and a proposal for a financial assurance which covers the costs to carry out the plan.

## **SECTION 8 :**

### **ENVIRONMENTAL ASSESSMENT AND SCREENING**

60. Has this project ever undergone an initial environmental review? If yes, by whom and when.

61. Has any baseline data collection and evaluation been undertaken with respect to the various biophysical components of the environment potentially affected by the project (eg. Wildlife, soils, air quality), ie. In addition to water treated information requested in this questionnaire ?

Yes \_\_\_\_\_ No \_\_\_\_\_ Unknown \_\_\_\_\_

62. If “Yes” please attach copies of reports or cite titles, authors and dates.

63. If no, are such studies being planned ? \_\_\_\_\_

Briefly describe the proposals.

64. Has authorization been obtained or sought from the Department of Fisheries and Oceans for dewatering or using any waterbodies for containment of waste?

65. Has a socio-economic impact assessment or evaluation of this project been undertaken ? (this would include a review of any public concerns, land, water and cultural uses of the area, implications of land claims, compensation, local employment opportunities, etc.)

Yes \_\_\_\_\_ No \_\_\_\_\_ Unknown \_\_\_\_\_

66. If “Yes” please describe the proposal briefly.

67. If “No” is such a study being planned ? Yes \_\_\_\_\_ No \_\_\_\_\_

68. Describe any cumulative impacts the project may create?

69. Does the project alter the quantity or quality or flow of waters through Inuit Owned Lands?

70. If yes, has the applicant entered into an agreement with the Designated Inuit Organization to pay compensation for any loss or damage that may be caused by the alteration.

71. If no compensation arrangement has been made, how will compensation be determined?