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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI

EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: Twin Mining Corporation **Licence No:** _____
(For NWB Use Only)

ADMINISTRATIVE INFORMATION

1. Environment Manager :____-_____ Tel:____-_____ Fax: ____-_____ E-mail ____-_____

2. Project Manager: **Richard Roy or Dallas Davis** Tel**: 819-874-4446** Fax: **819-874-4446** E-mail: **nordquest@cablevision.qc.ca (or, #'s for Dallas Davis** Tel: **506-450-7005** Fax**: 506-462-7277** E-mail: **dallas@brunnet.net**)

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
   [**X**] 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
   [**X**] Seasonally Occupied: **June or July through September**
   [ ] Permanent
   [ ] Other:_____

7. What are the design population of the camp and the maximum population expected on site at one time? **8 tents with total accommodation for 20 people: 1- office (sleeps 2 persons); 1- kitchen (sleeps 0 persons), 1 - washing & laundry (sleeps 0 persons), 1 - storage (sleeps 2 persons), 4 - accommodation (each sleeps 4 persons).** What will be the fluctuations in personnel? **6 to 20 people for a maximum of 12 weeks per year.**

8. Provide history of the site if it has been used in the past. **The camp was established in the year 2001 by Twin Mining Corporation. It has been occupied seasonally each summer (mid**

July-mid September) since 2001 and consists of 8 wood frame canvas tents. There have been no changes since it was set up.

CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies. **The camp is at latitude N 73°16'36.2" and longitude W 88°16'15.5". It sits on a limestone bedrock and boulder-covered terrace approximately 200 meters south of the Jackson River, 40 meters above the high water level of the river and 100 meters above sea level. The land surface is almost devoid of vegetation, but there are isolated wild poppies, lichens and a few other species. Because of the scarcity of vegetation, wildlife also is rare, but there is a small population of foxes, lemmings, ravens and seagulls. No fish have been seen in Jackson River which enters Jackson Inlet 10 kilometers west of the camp. As it approaches the coast, the river is more deeply incised as a gorge or canyon. Within a few kilometers of camp, hills on both sides of the river rise to 335 meters.**

10. How was the location of the camp selected? **The camp site were selected because it is sheltered from the wind, is near a source of water and is in close proximity to areas where diamond-bearing kimberlite is known to occur.** Was the site previously used? **No** Was assistance from the Regional Inuit Association Land Manager sought? **No** Include maps and/or aerial photographs. **Maps and a photo are included as attachments with the Water License application.**

11. Is the camp or any aspect of the project located on:
[**X**] Crown Land Land Use Permit Number (s)/Expiry Date: N2001C0028/July 22, 2004 (extension being requested)
[ ] Commissioners Lands Permit Number (s)/Expiry Date: **N/A**
[ ] Inuit Owned Lands Permit Number (s)/Expiry Date: **N/A**

12. Closest Communities (distance in km): **Ikpiarjuk (Arctic Bay) is 105 km east of the camp.**

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work? **The proposed work is on mineral claims contiguous with those on which the same soil sampling/prospecting/drilling was conducted in previous years and about which people of Arctic Bay have been briefed and consulted in previous years. Meetings and discussions were held in the spring of 2001 and 2002 with the Wildlife Officer and the Hunters and Trappers Association.**

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: _____

DRILLING INFORMATION

18. Drilling Activities
    - ○ **Land Based drilling**
    - ○ Drilling on ice

19. Describe what will be done with drill cuttings? **Impoundment of core drilling fine sediment or mud in a sedimentation basin at each drill site along with drilling water to allow settling of fines and clarification of the water. Return of the site to original appearance following completion of drilling.**

20. Describe what will be done with drill water? **Clarified drill water will be recycled from the impoundment sedimentation pond and used for drilling. A minor amount of water will seep into the overburden. This loss of water will cause no harm to the natural environment.**

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 additives except drill salts to keep hole from freezing (See information with previous application. No changes).

22. Will any core testing be done on site? Describe. **No**

SPILL CONTINGENCY PLANNING

23. Does the proponent have a spill contingency plan in place? Yes. Please include for review**. See "TWG Spill Contingency Plan.doc" attached to Water License renewal application.**

24. How many spill kits will be on site and where will they be located? **The diamond drill contractor will be required to have an ample supply of oil "diapers" for absorbing any small oil spills.**

25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets. **No chemicals on site apart from drill salts as described above. Fuel is stored in 45 gallon barrels. Barrels are removed from camp site after use.**

WATER SUPPLY AND TREATMENT

26. Describe the location of water sources. **The water source for the camp is the Jackson River, approximately 200 meters to the north. For drilling, most water is drawn from seasonal drainages, but, as explained below, much drilling water is recycled.**

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

- ○ Domestic Use: **20** Water Source: **Jackson River**
- ○ Drilling Units: **10,000 l/day** Water Source: **Seasonal drainages and also recycled from sedimentation ponds to reduce water and salt consumption**
- ○ 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: **Water is pumped into a bladder-type of reservoir. The intake in the river is surrounded by a screen to prevent intake of fish, debris or granular sediment.**

29. Will drinking water quality be monitored? **No** What parameters will be analyzed and at what frequency? **No parameters will be analyzed. All water will be boiled before consumption.**

30. Will drinking water be treated? How? **It will be boiled.**

31. Will water be stored on site? **Yes, it will be stored in a bladder-type reservoir of approximately 200 gallons.**

WASTE TREATMENT AND DISPOSAL

32. Describe the characteristics, quantities, treatment and disposal methods for:
    - ○ Camp Sewage (blackwater)

Placed in a surface hole that after usage will be covered with clay and sand

- ○ Camp Greywater

Drained into a sedimentation basin and percolated through the surrounding berm of clay and sand

- ○ Solid Waste

Transported to the Arctic Bay or Nanisivik municipal waste disposal site

- ○ Bulky Items/Scrap Metal

None expected

- ○ Waste Oil/Hazardous Waste

Recovered, placed in barrels and returned to the supplier by ship

- ○ Empty Barrels/Fuel Drums

Barrels and fuel drums are returned to the supplier by ship

- ○ Other:

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33. Please describe incineration system if used on site. **Steel barrel.** What types of wastes will be incinerated? **Small quantities of scrap wood and paper.**

34. Where and how will non-combustible waste be disposed of ? **Nanisivik or Arctic Bay.** If in a municipality in Nunavut, has authorization been granted? **Nanisivik granted authorization in previous years. In addition, authorization in 2004 will be sought from Arctic Bay.**

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

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? **No O & M problems occur since the number of camp occupants is small, the camp temporary and occupied only during the summer, and, all the relevant material is removed from the site after completion of the seasonal program.**

ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site. **All facilities will be disassembled and, if feasible, certain components taken to other projects for re-use. All other components and materials on site will be removed to a warehouse, the nearest acceptable refuse disposal site and/or sold, depending on their nature and usefulness. The site will be returned to the original state and nothing will remain.**

BASELINE DATA

39. Has or will any baseline information be collected as part of this project? **No formal collection of such information as yet, because more exploration is required to determine the specific site(s) and the prospective viability for any mining operation(s).** Provide bibliography.
    - ○ Physical Environment (Landscape and Terrain, Air, Water, etc.)
    - ○ Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic
    - ○ Organisms, etc.)
    - ○ Socio-Economic Environment (Archaeology, Land and Resources Use,
    - ○ Demographics, Social and Culture Patterns, etc.)
    - ○ Other:

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. **The documents relevant to Twin mining's project have been sourced on the internet.**