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NUNAVUT WATER BOARD  
NUNAVUT IMALIRIYIN KATIMAYINGI

## WATER LICENCE APPLICATION FORM

Application for: (check one)

☐ New ☐ Amendment ☒ Renewal (NWB2TAH0406) ☐ Assignment

### LICENCE NO:

(for NWB use only)

#### 1. NAME AND MAILING ADDRESS OF APPLICANT/LICENSEE

**Diamonds North Resources Ltd**  
**510-510 Burrard St.**  
**Vancouver, B.C.**  
**V6C 3A8**

Phone: 604 689 2010

Fax: 604 484 7143

e-mail: ggill@diamondsnorthresources.com

#### 2. ADDRESS OF CORPORATE OFFICE IN CANADA (if applicable)

Same as #1.

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

e-mail: \_\_\_\_\_

#### 3. LOCATION OF UNDERTAKING (describe and attach a topographical map, indicating the main components of the Undertaking)

**Kagloryuak River and Burns Lake areas of Victoria Island, Nunavut**  
**NTS Mapsheets 77F**

Latitude: 70 degrees 30 min Longitude: 109 degrees 50 min NTS Map No. 77F and 77G

Scale 1:250,000

#### 4. DESCRIPTION OF UNDERTAKING (attach plans and drawings)

The proposed exploration program is a **continuation** of Diamonds North's diamond exploration efforts that have been ongoing on Victoria Island during 2002-2005. This program consists of conventional mineral exploration techniques that are designed to locate and test certain rock types for their diamond potential only. The program will involve three main phases of exploration operated (nonconcurrently) from two base camps housing up to 15-25 men; the locations of which are shown on the accompanying map. Two camps will be required due to the distances to the work sites/kimberlite occurrences. The first stage will involve regional till sampling and additional airborne magnetic surveying. Once the data from the stage one program has been interpreted only those areas meeting certain geophysical/geological criteria will be considered for additional follow-up work. Stage two will involve site specific work including ground geophysical surveying and prospecting. This will involve the daily shuttling, via helicopter, of a 2-4 man crew to each target to establish a wooden picketed grid which will be used as control for subsequent ground geophysical surveying. As the results from the stage 1 and 2 work become available further interpretation of the data will provide the basis for stage 3 target delineation which involves small scale trenching and hand pitting as well as diamond drilling of select targets to collect sample material for diamond analysis. Note that some of the drilling program will overlap the Stage 1 and 2 programs as drill targets have been identified from exploration work conducted in previous years.

The single drill unit will be heli-portable and surface disturbance of the drilling phase will be very localized and minimal. Each drill site will cover approximately 100 (10 x 10) square meters and drill pads will be returned as near as possible to their original state. All garbage and fuel drums will be backhauled to camp and then to the approved landfill site in Cambridge Bay.

**5. TYPE OF UNDERTAKING** (A supplementary questionnaire must be submitted with the application for undertakings listed in “**bold**”)

<input type="checkbox"/> Industrial	<input checked="" type="checkbox"/> <b>Remote/Tourism Camps</b>
<input type="checkbox"/> <b>Mine Development</b>	<input type="checkbox"/> <b>Municipal</b>
<input type="checkbox"/> <b>Advanced Exploration</b>	<input type="checkbox"/> Power
<input checked="" type="checkbox"/> <b>Exploratory Drilling</b>	<input type="checkbox"/> Other (describe): _____

**6. WATER USE**

<input checked="" type="checkbox"/> To obtain water	<input type="checkbox"/> To divert a watercourse
<input type="checkbox"/> To modify the bed or bank of a watercourse	<input type="checkbox"/> Flood control
<input type="checkbox"/> To alter the flow of , or store, water	<input type="checkbox"/> Other (describe): _____
<input type="checkbox"/> To cross a watercourse	

**7. QUANTITY OF WATER INVOLVED** (litres per second, litres per day or cubic metres per year, including both quantity to be used and quality to be returned to source)

**Camp Use:** Water to be used for domestic purposes and sample washing only. Camp will house up to 15-25 people consuming on average 60 litres of water per day per person (up to 2.5 cubic metres/day). Discharge of grey water will be confined to hand dug sumps (2x3x3 meters) so no water will be returned to source and located no nearer than 30 meters of the ordinary high water mark.

**Diamond Drilling:** Estimated consumption is 40 litres of water per minute while the one drill is operating. This would equate to approximately 60 cubic meters per 24 hour shift **IF** the drill was operating all day. Under normal operations that involve 8 hours of drilling per shift, 38,400 litres (38.4 cubic metres) would be consumed daily. All drill water will be collected in hand dug sumps or natural depressions located 30 or more meters from the ordinary high water mark of any water body. No land based drilling will be conducted within 30 meters of the high water mark of any water body.

**8. WASTE** (for each type of waste describe: composition, quantity, methods of treatment and disposal, etc.)

<input checked="" type="checkbox"/> Sewage	<input checked="" type="checkbox"/> Waste oil
<input checked="" type="checkbox"/> Solid Waste	<input checked="" type="checkbox"/> Greywater
<input checked="" type="checkbox"/> Hazardous	<input checked="" type="checkbox"/> Sludges
<input type="checkbox"/> Bulky Items/Scrap Metal	<input type="checkbox"/> Other (describe): _____

**Sewage:** (Sanitary and Grey water) To be contained in a latrine pit, treated with lime and buried at time of camp shutdown. Pit will be placed so that no sewage effluent will be discharged. Latrine located no less than 30 meters from any water body.

**Garbage:** Burnable solid waste will be burned in vented, base-fuel feed barrel; non-burnable material, hazardous waste, waste oil and consumed camp equipment will be backhauled to an approved disposal site arranged by the expediting company hired to service camp.

**Sludges:** All sludges from drilling will be contained in a hand dug sump or natural depression located no less than 30 meters from the ordinary high water mark of any water body, allowed to settle and prevented from entering any water body.

**9. PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING** (give name, mailing address and location; attach if necessary)

None. Work area is remote.

## Land Use Permit

DIAND ☒ Yes ☐ No If no, date expected Current permit N2005C0026

Regional Inuit Association ☒ Yes ☐ No If no, date expected Current permit KTL305F010

Commissioner ☐ Yes ☐ No If no, date expected N/A

## 10. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES (direct, indirect, cumulative impacts, etc.)

Cumulative environmental effects result from the combination of environmental effects from a number of different developments/activities. As the proposed program represents a continuation of Diamonds North's exploration activities on Victoria Island and no other projects are being carried out in the area no cumulative effects are expected.

Potential localized impacts include minor to negligible effects on caribou, harvesting activities, waterfowl and effects of drilling waste disposal.

Mitigation measures to be undertaken to reduce, control or eliminate potential environmental effects include;

- 1) Adhering to the Caribou Protection Measures; specifically not working in the core calving areas which are located some 100 kms to the south west of the exploration program.
- 2) Avoiding low level flights over areas known for waterfowl nesting.
- 3) Adhering to the Recommended Environmentally Acceptable Minimum Flight Altitudes.
- 4) Avoiding areas of documented harvesting activities which are located primarily around the shoreline of Prince Albert Sound in the Inuvialuit Settlement Region, some 50-70 kms away from the exploration areas.
- 5) Equipping all water intake hoses with an appropriate screen mesh size to ensure no entrapment of fish.
- 6) Provide necessary controls to prevent sedimentation and/or erosion of water bodies or adjacent land.
- 7) Using only lake water for drilling operations.
- 8) All drill waste will be disposed of and contained in natural depressions or hand dug sumps located at least 30 meters from any high water mark such that the waste does not enter any water bodies. As virtually 95% of the rock cored is brought to the surface and transported to camp (and then to the laboratory), the volume of drill waste created for a 100 meter long hole is only 0.24 cubic meters.
- 9) All trenches/pits/sumps will be backfilled and contoured when operations are complete.
- 10) Only environmentally acceptable and approved muds and additives (as per DIAND regulations) are to be used during drilling operations.
- 11) Drill holes to be plugged and permanently sealed if artesian flow is encountered.
- 12) All fuel caches will be located a minimum of 30 meters from the normal high water mark. Spill kits will be present at all fuel caches, drilling operations and at camp. Larger fuel caches will be bermed.
- 13) Diamonds North possesses and maintains a current Emergency Response Plan including a Fuel Spill Contingency Plan (previously accepted) that all employees and contractors are required to adhere to. These policies also include safety, emergency, fire and medi-vac procedures.
- 14) Diamonds North also maintains a progressive reclamation policy which effectively restores, as near as possible, any disturbance at any site to its original state before operations begin at the next site.

NIRB Screening ☒ Yes ☐ No If no, date expected \_\_\_\_\_

**NIRB has previously screened and accepted the original Land Use application and the Water Licence application as well as all amendment requests. Also, as the program is transborder in nature the project has been screened, reviewed and approved by both the EISC and EIRB for the work involved on the NWT portion of Victoria Island. As this renewal application covers a continuation of the original work program rather than a change in work type it is anticipated that no additional screening will be necessary.**

## **11. INUIT WATER RIGHTS**

Will the project or activity substantially affect the quality, quantity, or flow of water flowing through Inuit Owned Lands and the rights of Inuit under Article 20 of the Nunavut Land Claims Agreement?

No. All work to be conducted in a professional and environmentally sound manner to ensure no impact to local water bodies occurs and that water quality is not compromised.

### **11. (Continued)**

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? If no compensation agreement has been made, how will compensation be determined?

N.A.

## **12. CONTRACTORS AND SUB-CONTRACTORS (name, address and functions)**

Although bids have not been tendered for the work at this time it is anticipated that most of the contractors utilized in 2005 will be contracted for the upcoming program. These include the following:

### **Charter Aircraft:**

- 1) Adlair Aviation – Cambridge Bay, NU
- 2) Kitikmeot Helicopters/Great Slave Helicopters – Cambridge Bay/Yellowknife, NU/NT
- 3) First Air – Yellowknife, NT
- 4) Canadian North – Yellowknife, NT
- 5) Nunasi Helicopters – Yellowknife, NT

### **Expediting:**

- 1) Kitnuna Expediting – Cambridge Bay, NU
- 2) Wilf MacDonald Expediting – Cambridge Bay, NU
- 3) Discovery Mining Services – Yellowknife, NT

### **Suppliers:**

- 1) Kitnuna Construction – Cambridge Bay, NU
- 2) Kitikmeot Supplies – Cambridge Bay, NU
- 3) Fred Ross and Associates – Cambridge Bay, NU
- 4) Ikaluktutiak Co-op – Cambridge Bay, NU
- 5) Northern Store – Cambridge Bay, NU

### **Drilling:**

- 1) Peak Drilling – Yellowknife, NT
- 2) Major Midwest – Yellowknife, NT

### **Airborne:**

- 1) Fugro – Toronto, Ontario
- 2) Terraquest – Markham, Ontario

Geological/Geophysical work to be conducted by in-house personnel.

**13. STUDIES UNDERTAKEN TO DATE** (list and attach copies of studies, reports, research, etc.)

Water tests taken in 2002 as part of on-ice drilling program previously submitted to NWB in compliance with PART B: GENERAL CONDITIONS of Water Licence No. NWB2TAH0103. Water tests taken by RWED, NT (Rob Walker) both upstream and downstream of Tuktu Camp (Nunavut) in both 2003 and 2004. No negative results received. (See attached).

**14. THE FOLLOWING DOCUMENTS MUST BE INCLUDED WITH THE APPLICATION FOR THE REGULATORY PROCESS TO BEGIN**

Supplementary Questionnaire (where applicable: see section 5) **X** Yes \_\_\_ No \_\_\_ If no, date expected

Inuktitut/English Summary of Project **X** Yes \_\_\_ No \_\_\_ If no, date expected

Application fee \$30.00 (c/o of Receiver General for Canada) **X** Yes \_\_\_ No \_\_\_ If no, date expected

**15. PROPOSED TIME SCHEDULE**

\_\_\_ Annual (or) **X** Multi Year (Seasonal Activity)

Start Date: April 1st, 2006 Completion Date: March 31<sup>st</sup>, 2011

Graham Gill

Exploration Manager

\_\_\_\_\_  
December 15, 2005

Name (Print)

Title (Print)

Signature

Revised: January 31<sup>st</sup>, 2006

Date

For Nunavut Water Board use only

APPLICATION FEE Amount: \$ \_\_\_\_\_ Receipt No.:

WATER USE DEPOSIT Amount: \$ \_\_\_\_\_ Receipt No.: