



115° 26' 23" W

Coordinates of proposed camp:

Longitude: 64° 12' 0" N

Latitude: 116° 1' 11" W

*(note: Chalco Lake has been fully reclaimed and is included in the maps for reference purposes only)*

#### **4. DESCRIPTION OF UNDERTAKING**

(Describe and attach plans)

The purpose of this water licence renewal application is to renew the current Water Licence W2010L1-0002 (expiration 28 February 2019).

The proposed activities include:

- Construction, use, and maintenance of winter roads and spur roads within the land use area.
- Use of an existing base camp at the Colomac Site and satellite camps (if required) in the land use area.
- Use and storage of explosives for trenching and bulk sampling (if required).
- Establishment of fuel caches at existing fuel cache locations.
- Surface exploration, including prospecting, geological mapping, bedrock sampling, geophysics and surface diamond drilling (helicopter supported).

#### **5. TYPES OF UNDERTAKING**

Mining and Milling: Advanced mineral exploration and camp operations for up to 50 people.

#### **6. WATER USE**

To obtain water >100m<sup>3</sup>/day

#### **7. QUANTITY OF WATER INVOLVED**

(Litres per second, litres per day or cubic metres per year, including quantity to be used and quality to be returned to source)

The quantity of water usage requested for the entire Project is 298 m<sup>3</sup>/day. Based on water use for the Indin Lake Gold Project during previous years, the volume requested in this renewal application on Federal land is 60% of the total Project volume: 179 m<sup>3</sup>/day. It is anticipated that water usage will be:

- for the camp approximately 5,000 L/day (5 m<sup>3</sup>/day); and,
- for the drill water approximately 174,000 L/day (174 m<sup>3</sup>/day).

Freshwater will be drawn for camp and drill purposes from the nearest natural source of accessible water (excluding Pit 2 water) when drilling and exploration programs are active. It is anticipated the program may close between early-October and late-February, however, conditions may change and could see mineral exploration activities continue year round. Water intake will follow the Fisheries and Oceans Canada (DFO) 2010 protocol "DFO Protocol for Winter Water Withdrawal from Ice-covered Waterbodies

in the Northwest Territories and Nunavut". Water intake for the camp under open water conditions (if applicable) will follow DFO's 1995 "Freshwater Intake End-of-Pipe Fish Screen Guideline".

## **8. WASTE DEPOSITED**

(Quantity, quality, treatment and disposal)

Only grey and drill water will be deposited into the receiving environment. Greywater from camp activities will be discharged into a man-made rock-covered area near the camp and at a minimum 100 m from the ordinary high-water mark of any waterbody. The quality of greywater will be improved by using biodegradable, eco-friendly soap. Grease traps will be included into the greywater collection system to prevent oil and grease from entering the greywater system. Around 5 m<sup>3</sup>/day of greywater are expected to be deposited. Drill water (with non-hazardous additives) not lost in the drill hole may be processed through a standard unit to remove mud and suspended solids and will be recycled or pumped into a natural depression located more than 100m from the ordinary high-water mark of any waterbody if the hydraulic head permits pumping the return water and contained cuttings directly to a natural depression or sump located more than 100m from the ordinary high-water mark of any waterbody. Where no natural depression can be located more than 100 m from the ordinary high-water mark, drill water may be pumped to a natural depression of lesser distance if such suitable location assures materials do not enter a body of water and are approved by the Inspector, which approval shall not be unreasonably withheld. Up to 174 m<sup>3</sup>/day of drill water will be deposited each day during active exploration programs.

In accordance with the Waste Management Plan, all hazardous waste will be removed and transported safely to an appropriate, licenced disposal facility. As in the past, all waste handling, transportation and disposal will be contracted to KBL Environmental Ltd. (KBL) in Yellowknife, NWT. Before shipping, hazardous waste will be securely stored in a waste transfer area to prevent immobilization and to protect from physical hazards and weather. All non-hazardous, combustible waste, including camp waste, will be incinerated daily as per the Incinerator Management Plan or, if non-combustible, transported off site for disposal at a suitable facility. Sewage will be disposed of using eight Incinolet Electric Incineration Toilets. Clean ash from these units will be collected and shipped off-site for appropriate disposal through KBL. Any brush and trees that are cut will be laid out flat on the ground. No toxic drill additives will be used during drilling operations. Drill casings will be cut as close to the ground as possible and each hole will be capped.

For further information, please refer to the Waste Management Plan.

## **9. OTHER PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING**

(Give name, mailing address and location; attach list if necessary)

The Indin Lake Gold Property is located in the headwaters of the Indin River system which flows through Mōwhì Gogha De Nîîtâèè (the traditional territory of the Tłjchq) and eventually to the community of Behchokö on Marion Lake. Due to the distance between the grey and drill water deposit area and any natural waterbody (>100 m), and the complete lack of toxic drill additives, Nighthawk does not anticipate negative impacts on persons or properties. All efforts will be made to prevent direct or indirect deposit of waste into a waterbody.

Nighthawk engaged the Tłjchq Government, the Kwe Beh working group, the North Slave Métis Alliance, the Wek'èezhì Renewable Resources Board, and the Prince of Wales Northern Heritage Centre during

past submission processes. Nighthawk's Engagement Plan including a summary of current pre-submission engagement is included in this application.

### 10. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION

There are no predicted environmental impacts. The volume of water to be used is not expected to have an effect on the water level in any natural local water bodies.

Water intake under open water conditions will follow DFO's 1995 "Freshwater Intake End-of-Pipe Fish Screen Guideline". Water intake during ice-covered conditions will follow the Fisheries and Oceans Canada (DFO) 2010 protocol "DFO Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut".

Nighthawk will use biodegradable, eco-friendly soap and grease traps to improve the quality of the greywater to be deposited into a natural depression. Only non-hazardous drill additives will be used in the drill water. The grey and drill water will be deposited at least 100 m from the high-water mark of any waterbody. For further information, please refer the attached Spill Contingency Plan.

### 11. CONTRACTOR AND SUB-CONTRACTORS

(Names, addresses and functions)

- Golder Associates Limited (consultants)
- Tlicho Logistics and other Tlicho Investment Corporation companies (logistics, equipment and operators)
- Nighthawk personnel (project geologist)
- GeoMinEx Consultants Inc. (geologists, geological technicians, field assistants)
- Major Diamond Drilling (drilling personnel)
- Discovery Mining Services Ltd. (camp personnel, caretakers, assistants, Industrial Occupation First Aid Level 3 staff, camp cooks)
- Great Slave Helicopters (helicopter support for diamond drilling)
- Sub-Arctic Geomatics, Ltd (surveyors)
- Additional subcontractors may be required as the project progresses

### 12. STUDIES UNDERTAKEN TO DATE

(Attach list if necessary)

Aboriginal Affairs and Northern Development Canada was responsible for the remediation of the former Colomac Mine Site. Please refer to water licence *W2009L8-0003* and the associated reports and studies.

### 13. PROPOSED TIME SCHEDULE

Start Date: March 1, 2019

Completion Date: February 28, 2024

Michael J. Byron

Name (Print)



Signature

President & CEO, Director

Title (Print)

September 28, 2018

Date

Please refer to the attached Questionnaire for additional information.

***FOR OFFICE USE ONLY***

Application Fee      Amount: \$ \_\_\_\_\_      Receipt No.: \_\_\_\_\_

Water Use Deposit      Amount: \$ \_\_\_\_\_      Receipt No.: \_\_\_\_\_

(Please make all cheques payable to the Receiver General)