



4 November 2021

Joseph Mackenzie, Chair

Wek'èezhii Land and Water Board

#1-4905 48th St.

Yellowknife, NWT X1A 3S3

LAND USE PERMIT AND WATER LICENCE APPLICATION FOR THE NIGHTHAWK GOLD CORP INDIN LAKE GOLD PROPERTY

Dear Mr. Mackenzie,

Nighthawk Gold Corp. (Nighthawk) submits applications for a Type A Land Use Permit and split-interest Type A Water Licences to the Wek'èezhii Land and Water Board (WLWB) for ongoing mineral exploration, winter road construction, operation of camps, and fuel storage at the Indin Lake Gold Property.

Application Package

This application package includes the following documents:

- Application forms for a Land Use Permit and Water Licences (federal and non-federal).
- Engagement Plan (Version 4.0). This Plan is already approved under W2018C0007, and no changes were required for this application.
- Engagement record showing evidence of our communications with affected parties prior to submitting this application.
- Waste Management Plan (Version 4.0). This document has been updated to incorporate changes associated with this application and requires approval by the WLWB.
- Spill Contingency Plan (Version 4.0). This document has been updated to incorporate changes associated with this application and requires approval by the WLWB.
- Water Use Plan (Version 5.0). This document has been updated to incorporate changes associated with this application and requires approval by the WLWB. To aid with identifying lakes included in the Water Use Plan, a shapefile and KMZ file of possible water sources is included in the application.
- Wildlife Mitigation and Monitoring Plan (Version 4.0). This document has been updated to reflect changes to the Project and updates to the species at risk status.
- Proposed Land Use Permit and Water Licence (federal and non-federal) conditions, with changes indicated to illustrate proposed changes from the current authorizations.

Nighthawk Gold Corp.

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- A drainage assessment of the Damoti Lake site, prepared by Golder Associates Ltd., to support a proposed update to the point of discharge to the receiving environment (i.e., the location where effluent quality criteria apply).
- Updated security estimate (including categorization by land, water, federal and non-federal) using RECLAIM Version 7.0.
- A full list of NWT leases and claims and Federal leases owned by Nighthawk. Note that some claims may be converted to leases when they expire.
- Project maps showing the location and layout of the Project, and all active leases and claims.
- Application fees and water use fees:
 - Federal water licence application fee of \$30 and water use fees of \$2,920 (for 800 m³/day) for a total of \$2,950 payable to the Receiver General for Canada.
 - Non-federal water licence application fee of \$30 and water use fees of \$2,920 payable to the Government of the Northwest Territories.
 - Land use permit fees of \$150 and land use fees for federal areas of \$100, for a total of \$250 payable to Receiver General for Canada.
 - A cheque has been sent to the WLWB totalling \$3,230 payable to the Receiver General for Canada, and second cheque for \$2,920 payable to the Government of the Northwest Territories.
 - Provided separately to the WLWB are federal water licence application fee of \$30 for the discontinuance of W2018L2-0002 payable to the Receiver General for Canada, and an application fee of \$30 for the discontinuance of non-federal water licence W2018L2-0002 payable to the Government of the Northwest Territories.
- Site Restrictions for Colomac from W2018C0007 have been copied into the draft land use permit conditions.
- A summary of anticipated environmental impacts and mitigations, using the template provided by the MVLWB. This table summarizes impacts and mitigation for the entire Project (i.e., the Land Use Permit and both Water Licence applications) but excludes features that have already undergone preliminary screening (see a summary of previous preliminary screenings below).
- GIS files of the Colomac and Damoti camps. Detailed maps of the Colomac camp layout are submitted as a stand-alone shapefile, while regional and other maps are provided within the relevant management plans.
- A Closure and Reclamation Plan is not submitted with this application. Nighthawk submitted the Interim Closure and Reclamation Plan Version 3.3 for the Damoti site under W2018L2-0003, which was approved by the Board on 21 May 2021. Preliminary closure information is provided in the application forms. Nighthawk proposes that a Closure and Reclamation Plan be submitted prior to the expiry of the land use permit, or at an earlier date at the request of the Board.

Nighthawk holds a valid GNWT Prospector's License #33742, and federal Prospecting License NEF0012. Note that the Project would occur on federal and non-federal lands, but not on Tłı̨chǫ Lands.

Preliminary Screening

Previous preliminary screenings for mineral exploration at the Indin Lake Gold Property have been completed, summarized below.

- Preliminary Screening of W2006C0001 (MV2005C0020) dated 9 February 2006 ¹
- Preliminary Screening of W2012C0002 dated 29 February 2012, to include additional camp, fuel storage and exploration area ²
- Preliminary Screening of W2012C0002 Amendment dated 28 May 2014, to include additional leases, with possible satellite camp and fuel storage at the new location ³
- Applications for W2018C0007, W2018L2-0002 and W2018L2-0003 were exempt from Preliminary Screening as the scope of work was unchanged since the previous screenings ⁴
- Preliminary Screening of W2018C0007 to add new equipment ⁵
- Preliminary Screening of W2018L2-0003 and W2018C0007 following an amendment request in 2021 to include new mineral leases⁶

In each of these Preliminary Screenings, it was found that there was no reasonable likelihood that the Project might have a significant adverse impact on the environment or might be a cause of public concern.

No activities are proposed in this application that were not already within the scope of W2018L2-0002, W2018L2-0003 and W2018C0007. The key changes in equipment and facilities in this application include:

- Increase of the camp capacity from 80 people to 100, including additional sleeper tents and other supporting infrastructure at the Colomac camp.
- Increase in water use from 299 m³ per day to 800 m³ per day to accommodate more intensive drilling and a larger camp, but with no additional drills to the 7 currently permitted under W2018C0007.
- Increase in fuel capacity from 300,000 litres to 1,255,830 litres, to be transported and stored in drums. The increase is to allow the full year of diesel requirements to be transported to Colomac by winter road.
- Increase the number of helicopters from 2 to 4.

A summary of anticipated environmental impacts and proposed mitigation are provided with this application.

¹ <http://registry.mvlwb.ca/Documents/W2006C0001/W2006C0001%20-%20W2006L2-0001%20-%20MERC%20-%20Preliminary%20Screening%20-%20Land%20Use%20Permit%20and%20Water%20Licence%20-%20Feb%2006.pdf>

² http://registry.mvlwb.ca/Documents/W2012C0002/W2012C0002%20-%20Merc%20-%20Land%20Use%20Permit%20-%20Preliminary%20Screening%20-%20Feb%2009_12.pdf

³ http://registry.mvlwb.ca/Documents/W2012C0002/W2012C0002%20-%20Nighthawk%20-%20Amendment%20Application%20-%20Preliminary%20Screening%20-%20May%2009_14.pdf

⁴ http://registry.mvlwb.ca/Documents/W2018C0007/W2018C0007%20-%20Nighthawk%20-%20LUP%20and%20WL%20Applications%20-%20Reasons%20for%20Decision%20-%20Jan%2024_19.pdf

⁵ http://registry.mvlwb.ca/Documents/W2018C0007/W2018C0007%20-%20Nighthawk%20-%20LUP%20Amendment%20-%20PS%20Determination%20Notification%20and%20RFD%20-%20Nov%2019_20.pdf

⁶ http://registry.mvlwb.ca/Documents/W2018C0007/W2018C0007%20-%20Nighthawk%20-%20WL%20and%20LUP%20Amendment%20-%20PS%20Determination%20Notification%20and%20RFD%20-%20Apr%2022_21.pdf

Termination of Existing Authorizations

Nighthawk requests discontinuance of Permit W2018C0007 on the effective date of the new permit W2021C0009. Nighthawk requests of the WLWB that Permit W2021C0009 fully replace W2018C0007 and that operations may continue through the transition. Nighthawk will submit a final plan for W2018C0007 within 60 days of the discontinuance of the permit, and will request that security be transferred at the appropriate time. It is understood that there are no fees associated with discontinuance.

Nighthawk requests cancellation of Water Licence W2018L2-0002, for the reason that Nighthawk requires a Type A Water Licence and has applied to the WLWB for it to be fully replaced by the federal licence W2021L2-0005. Nighthawk has submitted closure plans with this application, but no closure activities are planned as operations will continue through the transition. An application fee for cancellation of \$30 payable to the Receiver General for Canada has been provided.

Nighthawk requests cancellation of Water Licence W2018L2-0003, for the reason that Nighthawk requires a Type A Water Licence and has applied to the WLWB for it to be fully replaced by W2021L2-0004. Nighthawk has submitted closure plans with this application, but no closure activities are planned as operations will continue through the transition. An application fee for cancellation of \$30 payable to the Government of the Northwest Territories has been provided.

It was indicated during pre-application engagement for these applications that Nighthawk will request that the WLWB replace the existing authorizations with the new authorizations.

Closure Cost Estimate

In the Reasons for Decision for the Closure and Reclamation Plan⁷, Decision #20 required that Nighthawk submit an updated RECLAIM estimate to reflect the approved Version 3.3 within 120 days of the decision. Rather than submit the updated RECLAIM estimate under W2018L2-0003, Nighthawk submits it with this application. Nighthawk has engaged with GNWT and CIRNAC in the preparation of this updated closure cost estimate.

Damoti SNP Program

As the WLWB is aware, the current licence W2018L2-0003 defines a point of discharge for mine water at the Damoti site but does not define a point of discharge for runoff from the rock piles to the Receiving Environment. As such, there has been ambiguity if and where the effluent quality criteria (EQC) in the Licence apply to runoff. The WLWB is also aware that the pH of the pond at SNP 5-10 has consistently been below EQCs, since monitoring began in 2013.

Since the spring of 2021, Nighthawk has been obliged to undertake treatment of SNP 5-10 to raise the pH to within the Licence criteria. To date, SNP 5-10 has been treated with approximately 20 kilograms of sodium carbonate over 12 treatment visits to raise the pH. This is a far larger volume of sodium carbonate than should be required considering the volume of 5-10 (estimated at up to 60 cubic metres in 2021, but in some previous years it

⁷ https://registry.mvlwb.ca/Documents/W2018L2-0003/W2018L2-0003%20-%20Nighthawk%20-%20ICRP%20Version%203.3%20-%20Reasons%20for%20Decision%20-%20May%2021_21.pdf

has been less than one cubic metre). On each occasion, the pH at SNP 5-10 has dropped back to below Licence criteria by the next visit.⁸

Nighthawk is of the opinion that the ongoing treatment of SNP 5-10 should be discontinued, as it has been ineffective (as the pH quickly returns to pre-treatment levels), expensive (estimated at approximately \$250,000 for six months of treatment and testing), disregards local conditions (the upstream muskeg has water naturally below Licence limits), there is little or no risk to the receiving environment (the next downstream SNP station is typically within pH limits), and is causing residual effects (treatment causes short-term turbidity and precipitates are accumulating on macrophytes, and greenhouse gas emissions from the helicopter flights to Damoti to treat this pond are causing unnecessary environmental impacts).

Nighthawk has investigated several options to resolve this issue, both regulatory (including changing the SNP program or amending the Licence) and technical (such as filling SNP 5-10 with local material or imported limestone). Within this application, Nighthawk is proposing the following approach:

1. Maintain the EQC used in W2018L2-0003. As these criteria are derived from the Metal and Diamond Mining Effluent Regulations, they should be applied to the point of discharge to the Receiving Environment at Damoti (proposed as SNP 5-6).
2. Maintain SNP 5-2 (Outflow from Minewater Settling Pond) as a compliance station, subject to the same EQC as SNP 5-6.
3. Clarify that other SNP stations will continue to be monitored, but as monitoring stations to characterize water across the Damoti site rather than compliance stations.
4. The exception to #3 is SNP 5-7, which is consistently dry (no ponded water). It is recommended to remove SNP 5-7 from Annex A in the new Water Licence.

This application includes a drainage assessment report prepared by Golder Associates Ltd., which provides evidence that SNP 5-6 is an appropriate point of discharge and compliance SNP station. Nighthawk considers Lardass Lake to be the nearest “natural aquatic environment”, and as such is the Receiving Environment as defined in the Licence. As there are two other SNP stations between SNP 5-6 and Lardass Lake (SNP 5-14 and 5-4), the Licence and SNP monitoring will remain protective of the receiving environment and monitoring will continue to detect any changes over time.

The approach described above are included in the draft conditions for the non-federal water licence. Nighthawk believes this approach to be aligned with the MVLWB Water and Effluent Quality Management Policy, which states that effluent quality criteria should be selected that “proponents can reasonably and consistently achieve.”

⁸ https://registry.mvlwb.ca/Documents/W2018L2-0003/W2018L2-0003%20-%20Nighthawk%20-%20Inspector%27s%20Summary%20of%20Activities%20RE%20SNP%20Exceedances%20-%20Aug%2011_21.pdf

Closure

We thank you for considering this amendment application. Should you have any questions or need any additional information, please feel free to contact the undersigned.

Regards,

Nighthawk Gold Corp.

A handwritten signature in black ink, reading "D Lockett". The signature is written in a cursive style with a large initial "D" and a long horizontal stroke at the end.

Denise Lockett
Manager, Stakeholder Relations, Licensing and Permitting