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Reasons for Decision

Reference/File Number:	W2018C0007, W2018X0006, W2018L2-0002, and W2018L2-0003
Licensee:	Nighthawk Gold Corp.
Subject:	Land Use Permit and Water Licence Applications

Decision from the Wek'èezhìi Land and Water Board Meeting of January 24, 2019

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1.0 Decision

On January 24, 2019, the Wek'èezhìi Land and Water Board (the Board) met to consider a request by Nighthawk Gold Corp (Nighthawk) for the approval of Land Use Permits W2018C0007 and W2018X0006, and Water Licences W2018L2-0002 and W2018L2-0003. The Board has:

1. confirmed that all four Applications submitted by Nighthawk are exempt from preliminary screening in accordance with the Exemption List Regulations;
2. issued Type A Land Use Permit W2018C0007 for a period of 5 years;
3. issued Type A Land Use Permit W2018X0006 for a period of 5 years;
4. issued Type B Water Licences W2018L2-0002 and W2018L2-0003, each for a period of 5 years;
5. requested that sixty days prior to water use (from sources other than Steeves Lake and Baton Lake), Nighthawk must submit a Water Use Plan for Water Licences W2018L2-0002 and W2018L2-0003 that contains the following information:
 - a. Name and location of Water Source(s), Timing of Use, and Maximum Quantity of Water use (m³);
 - b. An estimate of the volume and maximum ice thickness for the Water source(s);
 - c. Any available bathymetric information, including maximum depths; and
 - d. Any available information on other Water uses from the source(s).
6. directed Nighthawk to post the securities within 120 days of the Issuance of the authorizations;
7. directed Nighthawk to use unit costs provided in the RECLAIM model, and to submit supporting information when using specified costs or allowances, in future security estimates;
8. stated that the Board recognizes the need for Nighthawk to assess and potentially refine the security estimate during the ICRP review;
9. approved Version 3.0 of the Engagement Plan, and direct Nighthawk to include information on engagement specific to closure and reclamation in a revised version of the Engagement Plan. Nighthawk must work with Board staff to determine a timeline for this submission, which must be submitted no later than December 2020;
10. approved Version 3.0 of the Waste Management Plan, and direct Nighthawk to submit Version 3.1 of the Waste Management Plan by February 28, 2019. Nighthawk is to work with Board staff to determine an alternative submission date if this timeline cannot be met. Version 3.1 must include the revisions as discussed in section 3.6.2;
11. approved Version 3.0 of the Spill Contingency Plan, and direct Nighthawk to submit Version 3.1 of the Spill Contingency Plan by February 28, 2019. Nighthawk is to work with Board staff to determine an alternative submission date if this timeline cannot be met. Version 3.1 must include the revisions as discussed in section 3.6.3; and
12. requested Nighthawk to work collaboratively with the GNWT-ENR and the Wek'èezhìi Renewable Resources Board on wildlife management aspects.

2.0 Background

Nighthawk is a junior gold exploration company in the preliminary stages of mineral exploration. Its primary exploration property is the Indin Lake Gold Project, which is located in the Wek'èezhìi area.

Nighthawk's Indin Lake Gold Project consists of mineral leases and staked claims in an 899km² area, and contains the former Colomac Mine (222km north-northwest of Yellowknife), the Damoti Lake exploration area (200km north-northwest of Yellowknife), and several other former exploration sites. In December 2011, Nighthawk negotiated an agreement with Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) to remediate the Diversified/Indigo Mine (205km north-northwest of Yellowknife), Spider Lake exploration site (233km north-northwest of Yellowknife), and Chalco Lake exploration (210km north-northwest of Yellowknife) site in exchange for mineral claims and leases at the Colomac site.

On September 28, 2018, Nighthawk submitted Applications for a Permit for remediation activities on non-federal lands, a Permit for exploration activities on federal and non-federal lands, and two Licences for activities on federal and non-federal lands respectively. The Applications were for Nighthawk to continue their exploration and remediation activities in the Indin Lake Gold Project area. With the Applications, Nighthawk included an Engagement Plan,¹ Waste Management Plan,² Incinerator Management Plan,³ Spill Contingency Plan,⁴ Wildlife Mitigation and Monitoring Plan,⁵ and a RECLAIM estimate⁶ (including notes⁷ and spreadsheets⁸). Nighthawk also submitted draft Permits,^{9,10} and Licences,^{11,12} and made payments for the Application fees and Water Use fees. After conducting a completeness check of the Application, the Board communicated to Nighthawk that the Application was incomplete.¹³ The Application did not contain the following:

- 1) evidence of pre-submission engagement;
- 2) evidence of agreement to access Tłı̄chǫ Lands from the Tłı̄chǫ Government;
- 3) a complete description and summary of land use activities;
- 4) required information regarding the construction and use of camps; and
- 5) GIS data.

The Board also recommended Nighthawk submit a Water Licence Questionnaire that was referenced in the initial application. On October 16, 2018, Nighthawk re-submitted¹⁴ the Permit^{15,16} and Licence^{17,18}

¹ See WLWB Registry for [Nighthawk – Engagement Plan – Version 3.0 – Sep 20 18](#)

² See WLWB Registry for [Nighthawk – Waste Management Plan – Version 3.0 – Sep 20 18](#)

³ See WLWB Registry for [Nighthawk – Incinerator Management Plan – Version 3.0 – Sep 20 18](#)

⁴ See WLWB Registry for [Nighthawk – Spill Contingency Plan – Version 3.0 – Sep 20 18](#)

⁵ See WLWB Registry for [Nighthawk – Wildlife Mitigation and Monitoring Plan – Version 3.0 – Sep 20 18](#)

⁶ See WLWB Registry for [Nighthawk – RECLAIM estimate 2018 – Oct 5 18](#)

⁷ See WLWB Registry for [Nighthawk – RECLAIM estimate 2018 Notes – Oct 5 18](#)

⁸ See WLWB Registry for [Nighthawk – RECLAIM estimate spreadsheet 2018 – Nov 2 18](#)

⁹ See WLWB Registry for [W2018C0007 - Nighthawk - Draft Land Use Permit - Sep 20 18.pdf](#)

¹⁰ See WLWB Registry for [W2018X0006 - Nighthawk - Draft Land Use Permit - Sep 20 18.pdf](#)

¹¹ See WLWB Registry for [W2018L2-0003 - Nighthawk - Draft Water Licence - and Updated SNP - Sep 21 18.pdf](#)

¹² See WLWB Registry for [W2018L2-0002 - Nighthawk - Draft Water Licence - Sep 21 18.pdf](#)

¹³ See WLWB Registry for [Nighthawk - Land Use Permit and Water Licence Applications - Application Deemed Incomplete - Oct 9 18.pdf](#)

¹⁴ See WLWB Registry for [Nighthawk - Application letter - Oct 16 18.pdf](#)

¹⁵ See WLWB Registry for [W2018C0007- Nighthawk - Land Use Permit Application - Oct 16 18.pdf](#)

¹⁶ See WLWB Registry for [W2018X0006 - Nighthawk - Land Use Permit Application - Oct 16 18.pdf](#)

¹⁷ See WLWB Registry for [W2018L2-0002 - Nighthawk - Water Licence Application - Oct 16 18.pdf](#)

¹⁸ See WLWB Registry for [W2018L2-0003 - Nighthawk - Water Licence Application - Oct 16 18.pdf](#)

Applications, along with an updated Engagement Plan¹⁹ and a Water Licence Questionnaire.²⁰ In their resubmission, Nighthawk updated their Engagement Record, and specified in their Land Use Permit Applications that winter road construction would avoid Tłı̄chǫ lands, and that spur roads would not cross Tłı̄chǫ lands without an access agreement from the Tłı̄chǫ Government.²¹ Nighthawk also revised the Land Use Permit application to state why Nighthawk had limited information on drilling activities, provided additional details on camps, and submitted shapefiles. Board staff reviewed the updated information and deemed that there was sufficient information to distribute the Applications for public review. Board staff also prepared draft Permits and Licences that align with the Boards' standard conditions.

2.1 Public Review

The Application and supporting material were distributed for public review on October 26, 2018, with reviewer comments due by November 16, 2018.

Comments were received by Environment and Climate Change Canada (ECCC), Government of the Northwest Territories-Department of Education, Culture, and Employment (GNWT-ECE) Government of the Northwest Territories-Department of Environment and Natural Resources (GNWT-ENR), the Government of the Northwest Territories-Department of Lands Inspector (GNWT-Lands), Indigenous and Northern Affairs Canada-Contaminants and Remediation Division (INAC-CARD), and the Indigenous and Northern Affairs Canada-Northwest Territories Inspector (INAC-NWT). Board staff also submitted comments. Applicant responses were received by the November 23, 2018 deadline. Nighthawk submitted their responses to Board staff on November 24, 2018, a day past the deadline of November 23, 2018. The Review Summary Table, including reviewer comments and proponent responses, is available on the WLWB Online Registry (See Review Summary and Attachments²²).

3.0 Reasons for Decision

3.1 Exemption from Preliminary Screening

The Board confirms that the Applications submitted by Nighthawk are exempt from preliminary screening in accordance with the Exemption List Regulations.

Schedule 1, Part 1, paragraph 2.1 of the Mackenzie Valley Resource Management Act Exemption List Regulations (Exemption List Regulations) states that an application can be exempt from screening if:

A development, or part thereof, for which renewal of a permit, licence or authorization is requested (a) has not been modified; and (b) has fulfilled the requirement of the environmental assessment process established by the *Mackenzie Valley Resource Management Act*, the *Canadian Environmental Assessment Act*, or the Environmental Assessment Review Process Guidelines Order.

A preliminary screening of W2012C0002²³ and W2012X0003²⁴ were completed on February 29, 2012. A preliminary screening of W2012L1-0002 was completed on August 16, 2012.²⁵ A further preliminary

¹⁹ See WLWB Registry for [Nighthawk - Engagement Plan - Version 3.0 - Oct 16 18.pdf](#)

²⁰ See WLWB Registry for [Nighthawk - Water Licence Application Questionnaire - Oct 16 18.pdf](#)

²¹ See WLWB Registry for [W2018C0007 - Nighthawk - Land Use Permit Application - Sep 20 18.pdf](#)

²² See WLWB Registry for [W2018C0007 - Nighthawk - Review Summary and Attachment - Nov 26 18](#)

²³ See WLWB Registry for [W2012C0002 - Merc - Land Use Permit - Preliminary Screening - Feb 29 12.pdf](#)

²⁴ See WLWB Registry for [W2012X0003 - Merc - Land Use Permit - Preliminary Screening - Feb 29 12.pdf](#)

screening for an amendment to W2012C0002 was completed on May 28, 2014.²⁶ The preliminary screenings stated that there was no reasonable likelihood that the proposed developments might have a significant adverse impact on the environment or might be a cause of public concern.

The Board has reviewed the scope of the Applications and believes that they are not being expanded to include any activities beyond the scope of the previous Permits and Licence. The Board believes that the renewal applications are exempt from the Preliminary Screening as per the Exemption List Regulations.

3.2 General Principles for the Land Use Permits and Water Licences

The scope, definitions, and conditions set forth in the Land Use Permits (Permits) and Water Licences (Licences) have been developed in order to address the Board's statutory responsibilities and the concerns that arose during the regulatory process. In developing the Permits and Licences, changes were made to the previous Permits and Licence based on the following principles:

- To provide for the conservation, development, and utilization of land and water resources in a manner that will provide the optimum benefit generally for all Canadians and in particular for residents of Wek'èezhii, as per section 58.1 of the *Mackenzie Valley Resource Management Act* (MVRMA);
- To achieve consistency with policies and guidelines adopted by the Mackenzie Valley Land and Water Boards (MVLWBs);
- To update conditions to reflect the current status of Nighthawk's activities;
- To update conditions to achieve consistency with existing Permit and Licence conditions;
- To address recommendations from reviewers and the proponent; and
- To ensure overall clarity of the Permit and Licence requirements.

3.2.1 Requirements of Subsection 61 of the MVRMA

Pursuant to subsection 61(2) of the MVRMA, the Board may not issue a licence or permit except in accordance with any applicable land use plan. The Board noted that Nighthawk has two mineral leases (NT-3216 and NT-4574) that contain, or are on, Tłıchq land. The Tłıchq Land Claims and Self-Agreement Settlement (Tłıchq Agreement) (part 2 of the appendix to chapter 18) lists several existing third-party interests (such as mineral claims or leases) on Tłıchq lands. The Tłıchq Agreement states that, for mining claims or leases created prior to the Tłıchq Agreement, the management of these existing interests lies with the Government of Canada. Mineral lease NT-3216 is listed as an existing interest in the Tłıchq Agreement, however, lease NT-4574 is not. The Board contacted the Miner's Recorder's Office regarding this lease and were informed that NT-4574 was previously mineral claim F35390, which is listed as an existing interest in the Tłıchq Agreement. The manager of the Tłıchq Government's Department of Culture and Lands Protection was included in this correspondence, and no comments have been received.

²⁵ See WLWB Registry for [W2012L1-0002 - Nighthawk - Type B Water Licence - Preliminary Screening - Aug 16 12.pdf](#)

²⁶ See WLWB Registry for [W2012C0002 - Nighthawk - Amendment Application - Preliminary Screening - May 29 14.pdf](#)

3.3 Determination Relating to Land Use Permit W2018C0007

The Board issues Type A Land Use Permit W2018C0007 for a period of 5 years.

A Permit was distributed as part of the public review. Comments and proponent responses received during the public review are described below. The Board believes that all other issues raised in the public review were adequately resolved.

3.3.1 Scope

The activities within the scope of the Permit are unchanged from Nighthawk's W2012C0002 Permit, however the wording of the scope has been updated to reflect more recently issued Permits.

This Permit, if issued, entitles the Permittee to conduct the following land use operation:

- a) Mineral Exploration including diamond drilling;
- b) Construction, maintenance, and use of winter road and access roads;
- c) Use and storage of fuel;
- d) Use and storage of explosives;
- e) Operation of camps; and
- f) Use of vehicles and equipment.

The GNWT-Lands Inspector (GNWT-Lands comment 6) recommended that the wording in the scope be changed to reflect multiple camps and vehicles. Nighthawk did not provide a response. The Board revised the wording of the scope from 'camp' and 'vehicle' to 'camps' and 'vehicles', as shown above, to reflect the Inspector's recommendation.

A specific location was not included in the Permit that was publically reviewed. The Board has specified this as the Damoti Lake and Colomac Mine areas, in line with the previous Permit and the preliminary screenings.

3.3.2 Conditions

During the public review, several comments/recommendations regarding changes or additions to the conditions of the Permit were received. Issues raised during the public review regarding Permit conditions are discussed in more detail below. During the public review, the draft authorizations contained conditions where reviewers could suggest an appropriate amount (i.e. "The Permittee shall not conduct any part of the land-use operation within _____ metres of any privately owned or leased structures..."). Where reviewers have not provided a suggestion, the Board inserted an appropriate figure or wording based on recently issued authorizations.

The GNWT-Lands Inspector (GNWT-Lands comment 10) recommended that condition 14, requiring Nighthawk to have fire-fighting equipment at the site, be removed. The Inspector stated that the *Forest Management Act*, Regulations, and Guidelines dictate the requirements of a person, and therefore the condition does not need to be included in the Permit. Nighthawk responded stating no comment. This is a standard condition on the Land and Water Boards' standard condition list. This condition was not in the previous Permit or the draft Permit submitted by Nighthawk. Nighthawk stated in response to GNWT-ENR (GNWT-ENR comment 2) that open burning may be required for clean wood waste. Nighthawk's exploration activities typically extend from March to October, as stated in their response to GNWT-ENR (GNWT-ENR comment 8), which encompasses the forest-fire season. This condition is applicable where there is risk of a land use operation starting a fire where the Permittee proposes to dispose of timber, brush, and/or debris by burning during the forest fire season.

If Nighthawk intends to open burn clean wood waste during the forest-fire season, then there may be a fire risk, and having fire-fighting equipment on site would reduce the risk of an uncontrolled fire. The Board believes the inclusion of this condition is reasonable.

The GNWT-Lands Inspector (GNWT-Lands comment 11) recommended that condition 16, requiring the Permittee to refill and restore craters caused by explosives, be removed. The Inspector stated it is applicable to seismic operations and none of the activities proposed by Nighthawk. Nighthawk responded stating no comment. Nighthawk specified in their Permit Application that explosives would be used for trenching and/or bulk sampling.²⁷ This is a standard condition on the Boards' standard condition list. This condition was not in the previous Permit or the draft Permit submitted by Nighthawk. The Board believes that the inclusion of this condition is reasonable because Nighthawk has indicated its intent to use explosives and craters resulting from the use of explosives can be a safety hazard to people and animals.

The GNWT-Lands Inspector (GNWT-Lands comment 12) recommended that condition 24, requiring the Permittee to insulate the ground surface beneath all structures for permafrost protection, be removed. The Inspector stated this is not applicable to tent/weather-haven camps. Nighthawk responded stating no comment. This is a standard condition on the Boards' standard condition list. This condition was not in the previous Permit or the draft Permit submitted by Nighthawk. The Board notes that Nighthawk stated in the Permit Application that the existing Colomac camp will be used as the base camp, which has 20 insulated tents on wood platforms.²⁸ Given the majority of Nighthawk's camp operations are based at the Colomac camp, which has structures with existing permafrost protection, the Board agrees with the recommendation by the Inspector and has removed the condition.

The GNWT-Lands Inspector (GNWT-Lands comment 13) recommended that condition 39, requiring the Permittee to not use any Drilling Fluids not identified in the application unless Material Safety Data Sheets (MSDS) are authorized by the Board, be removed. The Inspector stated this is mitigated by condition 40, which requires the Permittee to provide MSDS sheets to the Board and an Inspector at least seven days prior to using any chemicals not identified in the application. Nighthawk responded stating no comment. This is a standard condition on the Boards' standard condition list. This condition was not in the previous Permit or the draft Permit submitted by Nighthawk. The Board agrees with the Inspector's recommendation and have removed the condition 39.

The GNWT-Lands Inspector (GNWT-Lands comment 16) recommended that condition 61, requiring the Permittee to examine all Fuel Storage Containers and Tanks frequently, and to repair all leaks immediately, be removed. The Inspector stated that this cannot be complied with during seasonal shutdowns, and that fuel tank inspections are regulated by the Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations. The INAC-NWT Inspector (INAC-NWT comment 14) recommended that this condition be amended to apply only to fuel storage containers less than 230 litres, and tanks larger than 230 litres that are connected to an emergency generator or heating appliance, as these are not captured by the Regulations. The Inspector also stated this should only apply when the camp is occupied. Nighthawk responded stating no comment. This is a standard condition on the Boards' standard condition list. This condition was not in the previous Permit or the draft Permit submitted by Nighthawk. The Board has retained the standard condition in the Authorizations, as this condition reduces the likelihood of spill incidents by defining a frequency that fuel storage containers must be checked.

²⁷ See WLWB Registry for [W2018C0007- Nighthawk - Land Use Permit Application - Oct 16 18.pdf](#)

²⁸ *Ibid.*

The GNWT-Lands Inspector (GNWT-Lands comment 17) recommended that condition 65, requiring the Permittee to only use stands for supporting Fuel Storage Containers that are approved by an Inspector, be removed. The Inspector stated that Inspectors do not approve fuel stands and other conditions in the Permit and Regulations mitigate concerns from fuel handling and storage. Nighthawk responded stating no comment. This is a standard condition on the Boards' standard condition list. This condition was not in the previous Permit, or the draft Permit submitted by Nighthawk. The intent of this condition is to reduce the likelihood of failure and spillage, and to facilitate the inspection of containers. There are 15 conditions concerning fuel storage in the Permit. The Board believes that these conditions collectively meet the intent of condition 65 and has removed the condition to reflect reviewer comments.

The GNWT-Lands Inspector (GNWT-Lands comment 19) recommended that condition 79, requiring the Permittee to clear by hand all trees and brush from the top edge of all stream banks and slopes, be removed. The Inspector stated it was not applicable to the land use operations proposed. Nighthawk responded stating no comment. This is a standard condition on the Boards' standard conditions list. This condition was not in the previous Permit, or the draft Permit submitted by Nighthawk. The intent of this condition is to prevent erosion. Based on maps provided by Nighthawk and photos from previous Inspection Reports,^{29, 30} the Board believes there are areas that could be affected by erosion and that this condition should remain in the Permit.

During the public review, there were two different proposals by GNWT-ECE (GNWT-ECE comment 1) and the Inspectors (INAC-NWT comment 11 and 12) (GNWT-Lands comment 15) on the submission date of the Archeological Overview (Condition #57), which requires the Permittee to identify areas of high and low potential for archeological and burial sites. GNWT-ECE recommended "at least 30 days" prior to any new land disturbance, while the Inspectors' recommended 10 days an acceptable timeline.

Nighthawk responded to GNWT-ECE stating that an Archeological Impact Assessment was completed for the Damoti camp area in 1997, the results of this were incorporated into Nighthawk operations, and no heritage concerns have been raised in previously disturbed areas. Nighthawk further stated that ongoing drilling operations have a small footprint of disturbance and will be set back at least 100 metres from heritage-sensitive landforms and are anticipated to have a low likelihood of disturbing archaeological sites. Nighthawk stated they are aware that any new camps, changes to winter road alignment, trenching or bulk sampling will require an Archeological Overview, and will contact ECE prior to such undertakings.

The condition noted by GNWT-ECE had already been included in the Permit (conditions 57), however, the standard condition states that the Archeological Overview would be required "At least ___ days prior to any new land disturbance, including new drill sites". The Board, having reviewed both recommendations made by the Inspector and the GNWT-ECE regarding condition 57, determined that the text remain as is and to include the '30' days prior as recommended by the GNWT-ECE, as the 30 days will allow GNWT-ECE sufficient time to review the Archeological Overview.

3.3.3 Security

GNWT-ENR (GNWT-ENR comments 30 - 32) commented that Nighthawk used specific allowances for most activities, rather than the unit costs provided in the RECLAIM estimate. GNWT-ENR accepts the majority of estimates but notes that Nighthawk should have provided information to support these specific allowances. GNWT-ENR recommended that future security estimates should use the unit cost

²⁹ See WLWB Registry for [W2012C0002 - Nighthawk - Land Use Inspection Report - September 5 2018 - Sep 6 18.pdf](#)

³⁰ See WLWB Registry for [W2012C0002 - Nighthawk - Land Use Inspection Report - March 23 2018 - Mar 29 18.pdf](#)

provided within the RECLAIM model, and that specified costs or allowances may be used but information supporting these amounts should be provided.

GNWT-ENR (GNWT-ENR comment 30) does not accept Nighthawk's estimates of the management of the waste rock on-site, and the management of residual fuel. GNWT-ENR noted that a key issue is potentially acid-generating (PAG) material in the waste rock at the Damoti site, with the security estimate being based on the proposal to encapsulate the PAG rock with non-PAG rock in the ICRP Version 3.1, which was not approved by the Board. GNWT-ENR stated the only option currently approved by the Board for the waste rock pile is an allowance for dozing and removing the PAG rock, with \$200,000 set aside for contingency. GNWT-ENR stated that this \$200,000 should remain included in the security estimate until a different method for addressing the waste rock pile is approved by the Board, and the corresponding costs are reviewed.

GNWT-ENR also noted that a second key issue is residual fuel on site, with Nighthawk's security estimate being based on the disposal of 1000 Litres of fuel. GNWT-ENR considers the amount of fuel should be 4000 litres, plus a 1500 litres allowance for fuel tank residuals at the Damoti site, based on the information previously provided by Nighthawk. GNWT-ENR believes the security estimate for the Damoti site should be \$509,807, with \$110,078 to be held in the Water Licence and \$399,729 to be held under a Lands instrument. GNWT-ENR recommended that the reclamation security be re-evaluated once an updated ICRP has been approved. Nighthawk agreed to use unit costs provided in RECLAIM or to provide additional detail in future RECLAIM estimates. Nighthawk further recommended maintaining the security as-is until the ICRP has been reviewed. Nighthawk has submitted Version 3.2 of the ICRP,³¹ which is expected to be distributed for public review in early 2019. The Board agrees with GNWT-ENR's recommendation, and directs Nighthawk to use the unit costs provided in the RECLAIM model and submit supporting information when using specified costs or allowances, in future security estimates.

The INAC-NWT Inspector (INAC-NWT comments 27) believed the security estimate provided by Nighthawk was inaccurate and submitted an updated security estimate. The INAC-NWT Inspector commented that it did not contain all of the required items, such as Nighthawk's estimates of tent frame unit costs, estimates of fuel stored at Colomac, and that the number of structures listed do not match the numbers noted during the last inspection of the site. The INAC-NWT Inspector agreed with Nighthawk's security estimate on the federal waters liability and indirect costs. The INAC-NWT Inspector proposed a security of \$21,614 be held in the Water Licence and \$137,696 be held under a Lands instrument. Nighthawk responded stating no comment. The Board agrees with the Inspector, as security estimates should be as accurate as possible, and recommend using the Inspector's security estimate, as specified in section 3.4.2 below.

Board staff (Board staff comment 3) noted the RECLAIM estimate was \$427,766, while the order-of-magnitude cost estimate for permanent closure in Version 3.2 of the ICRP was \$460,000. Board staff asked Nighthawk to provide rationale on the difference between the figures provided. Nighthawk responded stating the ICRP cost estimate was completed based on information from December 2016. Nighthawk stated the current estimate should be taken as the most up to date estimate, when read in conjunction with the recommendations from CIRNAC and GNWT-ENR. Nighthawk recommended maintaining the current security until the ICRP has been approved. The Board believes, as recommended below, that Nighthawk's security should align with the recommendations made by INAC and GNWT.

³¹ See WLWB Registry for [W2012L1-0002 - Nighthawk - Interim Closure and Reclamation Plan - Version 3.2 - Oct 31 18.pdf](#)

The Board notes that, as per *MVLWB/GNWT/INAC Guidelines for Closure and Reclamation Cost Estimates for Mines*,³² INAC and GNWT play a central role in estimating closure costs. Following comments received during the public review, the Board recommends a security of \$399,729 for the Permit. The Board recognises the need for Nighthawk to assess and potentially refine the security estimate during the ICRP review.

3.3.4 Colomac Site Restrictions

The Colomac site has been remediated, and INAC-CARD is undertaking long-term monitoring at the site. The current Permit contains the Colomac Site Restrictions, which are restrictions on Nighthawk's activities at the Colomac site, to ensure the shared use of the area supports long-term remediation. These restrictions include limits on access, establishing camps or storing equipment, drilling activities, and caribou management at the Colomac site. The Board included the Colomac Site Restrictions in the Permit for the public review and highlighted the section as non-standard. During the public review, the GNWT-Lands (GNWT-Lands comment 20) and INAC-NWT (INAC-NWT comment 7) Inspectors requested confirmation as to whether the Colomac Site Restrictions were still applicable. INAC-CARD (INAC-CARD comment 1) confirmed that these site restrictions were to be continued in the W2018C0007 Permit. INAC-CARD recommended altering a condition concerning fording across a channel. Nighthawk stated they would adhere to the CIRNAC's site restrictions. The Colomac Site Restrictions have been revised in the Permit, as per INAC-CARD's recommendation. The Board removed references to maps within the Colomac Site Restrictions, which were not provided with the Applications.

3.4 Determinations Relating to Land Use Permit W2018X0006

The Board issues Type A Land Use Permit W2018X0006 for a period of 5 years.

A Permit was distributed as part of the public review. This Permit was publically reviewed as a Type B Permit, however, following further investigation after the public review, the Board noted that the equipment listed in the application trigger the requirements for a Type A Permit. The Permit has been updated accordingly. Comments and proponent responses received during the public review are described below. The Board believes that all other issues raised in the public review were addressed.

3.4.1 Scope

The activities within the scope of the Permit are unchanged from Nighthawk's W2012X0003 Permit, however the wording of the scope has been updated to reflect more recently issued Permits. The location specified in the Permit that was publically reviewed was the Indin Lake Gold Property. The Board revised this to the Damoti Lake, Diversified, Spider Lake, and Chalco Lake sites, to align with the currently approved Permit and the preliminary screenings.

3.4.2 Conditions

During the public review, several comments/recommendations regarding changes or additions to the Permit were received. These largely referred to changing the wording of specific conditions or removing conditions that were not relevant. These are discussed in more detail below. During the public review, the draft authorizations contained conditions where reviewers could suggest an appropriate amount or wording (e.g. "The Permittee shall not conduct any part of the land-use operation within _____ metres of any privately owned or leased structures..."). Where reviewers have

³² See WLWB website for [MVLWB/GNWT/INAC Guidelines for Closure and Reclamation Cost Estimates for Mines \(2017\)](#)

not provided a suggestion, the Board inserted an appropriate figure or wording based on recently issued authorizations.

The INAC-NWT Inspector (INAC-NWT comments #19) recommended that a condition, requiring the Permittee to examine all Fuel Storage Containers and Tanks frequently and to repair all leaks immediately, be amended (as discussed in section 3.3.2). The Inspector recommended this should apply only to fuel storage containers less than 230 litres, and tanks larger than 230 litres that are connected to an emergency generator or heating appliance, as these are not captured by the Regulations. The Inspector also stated this should only apply when the camp is occupied. This is a standard condition on the Boards' standard condition list. This condition was not in the previous Permit, or the draft Permit submitted by Nighthawk. This condition reduces the likelihood of spill incidents, by defining a frequency that fuel storage containers must be checked. The Board has retained the standard condition in the Permit, as this condition reduces the likelihood of spill incidents by defining a frequency that fuel storage containers must be checked.

3.4.3 Security

The full discussion regarding security is addressed above in section 3.3.3. The Board notes that, as per *MVLWB/GNWT/INAC Guidelines for Closure and Reclamation Cost Estimates for Mines*,³³ INAC and GNWT play a central role in estimating closure costs. Following comments received during the public review, the Board recommends a security of \$137,696 for the W2018X0006 Permit.

3.5 Determinations Relating to Water Licences W2018L2-0002 and W2018L2-0003

3.5.1 Requirements of Section 26 and 27 of the Waters Act

The Board issues Type B Water Licences W2018L2-0002 and W2018L2-0003 for a period of 5 years.

The Licences were distributed as part of the public review. The content of the two Licences is largely identical, with the W2018L2-0003 Licence having effluent quality criteria and a Surveillance Network Program (SNP) for monitoring on non-federal lands. Comments and proponent responses received during the public review are described below, with separate subsections where reviewers commented on one specific Licence. The Board believes that all other issues raised in the public review were addressed.

In order to improve clarity, the details related to all management plans and reports required by the Licence have been moved to the Schedules. The purpose of this change is to allow the reader to more easily locate provisions relating to specific plans and reports and align with the new format of other recently issued licences.

3.5.2 Part A: Scope and Definitions

The Board noted that the scope of the current Licence did not include explosives, winter roads, and fuel. Nighthawk's application proposed these activities. Therefore, the Board updated the scope of both Licences. The scope of both Licences authorize the Licensee to use water and dispose of waste associated with advanced mineral exploration, the use and storage of explosives, the construction, operation, and maintenance of winter roads and spur roads, and the use and storage of fuel. The scope of the W2018L2-0003 Licence also includes Nighthawk's remediation activities on non-federal land. The wording of the scope was also updated, where appropriate, to be consistent with other water licences recently issued by the Board.

³³ See WLWB website for [MVLWB/GNWT/INAC Guidelines for Closure and Reclamation Cost Estimates for Mines \(2017\)](#)

W2018L2-0003 (non-federal) scope

GNWT-ENR (GNWT-ENR comment 23) commented on references to an existing camp at Colomac and satellite camps in the Licence Application, noting that the Application (W2018C0007) also references satellite camps that may be established on non-federal lands that would house up to 15 people. GNWT-ENR recommended that the Board clarify the inclusion of camps included within the scope of the non-federal Licence. GNWT-ENR further recommended that the scope of the project be updated as appropriate and only cover non-federal lands. Nighthawk confirmed in their response that they may require satellite camps on non-federal lands.

Previous preliminary screenings have included the use of satellite camps in the land use area.³⁴ The Board noted that the scope of the current Licence includes the use of water and deposit of waste for a camp occupied by more than 50 people. Nighthawk's application proposed a camp of this size at Colomac (which is on federal land). Therefore, the Board has updated the scope of the non-federal Water Licence (W2018L2-0003) to specify the use of satellite camps occupied by up to 15 persons. The scope of the W2018L2-0002 Licence still permits Nighthawk to use water and deposit waste for a camp occupied by more than 50 people.

3.5.3 Part B: General Conditions

Part B outlines matters regarding compliance and conformity with the MVRMA and the *Waters Act*, and an assortment of conditions that support the other parts of the Licence, including conditions pertaining to annual reporting and the location of a copy of the Water Licence. The conditions in Part B were updated, where appropriate, to be consistent with other water licences recently issued by the Board.

The INAC-NWT Inspector (INAC-NWT comment 4) commented that Nighthawk had previously used the maximum pump rate on site to estimate water usage, and recommended Nighthawk provide details and/or confirmation on how Nighthawk plans to monitor their water usage. Nighthawk confirmed they would continue to use maximum pump rates to estimate water usage and expect this to be well below the water use thresholds. The Board is satisfied with this response, as Nighthawk's actual water use would be far below the maximum pump rates.

3.5.4 Part C: Conditions Applying to Security Deposits

The wording of the conditions in Part C were updated, where appropriate, to be consistent with more recent water licences. The full discussion regarding security is addressed above in section 3.3.3.

3.5.5 Part D: Conditions Applying to Water Use

The total quantity of water not to be exceeded under these Licences has not changed as Nighthawk did not apply for more water than what is outlined in their current Licence. The total quantity has been divided between the two licences for the respective activities on federal and non-federal lands. Of the total 299m³/day that Nighthawk is currently licensed for, Nighthawk requested 179m³/day to be used for activities on federal land,³⁵ but did not request the amount to be specifically used for activities on non-federal land.³⁶

During the public review, ENR (ENR comment 20) recommended that water sources not be approved until additional information is provided including:

³⁴ See WLWB Registry for [W2012C0002 - Merc - Land Use Permit - Preliminary Screening - Feb 29 12.pdf](#)

³⁵ See WLWB Registry for [W2018L2-0002 - Nighthawk - Water Licence Application - Oct 16 18.pdf](#)

³⁶ See WLWB Registry for [W2018L2-0003 - Nighthawk - Water Licence Application - Oct 16 18.pdf](#)

- All source lakes that may be used to withdraw water;
- Requested maximum quantities of water to be withdrawn per year from each source lake;
- Bathymetric information on each source including depths and available water under-ice; and
- A comparison of total water volumes requested and approved from the source against total water available under-ice.

ENR further stated if the above is not available to the applicant, the applicant should at the very least provide a table-top assessment of the size, depth, and volume of water available in each source. Nighthawk responded that they would complete a desktop exercise to estimate volumes of all lakes within the claim block, and maximum annual under-ice withdrawal limits.

The Board appreciated Nighthawk's commitment to provide this information. However, there is a need for water sources to be identified prior to the approval of Water Licences. The Executive Directors of the Land and Water Boards of the Mackenzie Valley (Mackenzie Valley Land and Water Board, Gwich'in Land and Water Board, Sahtu Land and Water Board, and Wek'èezhìi Land and Water Board) have determined that for new water licences, certain water use information is required for preliminary screening.

Information on water sources must be included in Water Licence applications, including identification of the known or potential source(s), the total volume to be used, and the maximum volume to be used from each source. Ideally, the application should also include information about capacity, maximum expected ice thickness, bathymetry, fish-bearing status, and other water uses for each water source if available. This information will then be used to ensure the appropriate conditions regarding water use are included in the Water Licence.

The Board has included the following conditions in the W2018L2-0002 Water Licence:

1. The Licensee may only withdraw up to 179m³ per day of Water from the Water Sources identified in the **Water Use Plan**, as specified in Part D, Condition 2.
2. A minimum of 60 days prior to the use of Water, the Licensee shall submit a **Water Use Plan** to the Board, for approval. The Water Use Plan shall contain the following information:
 - a. Name and location of the lake(s) to be used as a Water Source(s);
 - b. Anticipated daily withdrawal volumes and duration of use, including a comparison of the total water volume requested for use against the total water volume available;
 - c. Any available bathymetric information, including maximum depths;
 - d. Any available information on other water uses from the source(s).
3. In one ice-covered season, total water withdrawal from a single waterbody shall not exceed 10% of the available water volume calculated using the appropriate maximum expected ice thickness.
4. For watercourses that are fish-bearing, prior to locating the intake hose, the Licensee shall obtain written authorization from an Inspector.
5. The Licensee shall construct and maintain the water intake(s) with a fish screen designed to prevent impingement and/or entrainment of fish.

The Board has also included these conditions in the W2018L2-0003 Water Licence (non-federal lands), specifying Nighthawk may only withdraw up to 120m³ per day.

With respect to the W2018L2-0002 Water Licence (federal lands), Nighthawk has provided information on Baton Lake and Steeves Lake in previous preliminary screenings. As such, the Board does not require Nighthawk to provide information prior to withdrawal from these water sources. The Board

notes that Nighthawk have also withdrawn water from the following Water Sources during previous drilling operations:

- Damoti Lake
- Lardass Lake
- Indin Lake
- Spider Lake
- Grizzly Bear Lake
- Dyke Lake
- Cass Lake

With respect to the Water Licence for non-federal lands, Nighthawk will need to submit a Water Use Plan, which provides information on water sources Nighthawk currently or intends to withdraw from, as specified in the new Water Licences.

The Board requests that sixty days prior to water use (from sources other than Steeves Lake and Baton Lake), Nighthawk must submit a Water Use Plan for Water Licences W2018L2-0002 and W2018L2-0003 that contains the following information:

- a. Name and location of Water Source(s), Timing of Use, and Maximum Quantity of Water use (m³);***
- b. An estimate of the volume and maximum ice thickness for the Water source(s);***
- c. Any available bathymetric information, including maximum depths; and***
- d. Any available information on other Water uses from the source(s).***

As per the existing Licence, Nighthawk is required to notify the Inspector of the source of drill water and the location of drill waste disposal, 48 hours prior to beginning drilling at a drill target. The INAC-NWT Inspector (INAC-NWT comment 5) commented that, as done in the past, Nighthawk can send drilling targets to the Inspector at the beginning of the field season, and that any changes to the targets/water sources/waste disposal areas need to be reported at least 48 hours prior. Nighthawk responded stating no comment. The Board believes that the addition of the condition for a Water Use Plan mitigates the need for Nighthawk to submit this information to the Inspector. Therefore, the Board has removed this condition from the Licences.

GNWT-ENR (GNWT-ENR comment 22) commented that the Application states that an SNP is not required on federal lands but requests water use for the camp at Colomac, and that an SNP station (5-3) was included previously solely to determine the potability of Damoti Lake water. GNWT-ENR further stated that drinking water sources fall under the jurisdiction of the *Public Health Act* and the Stanton Regional Health Board. GNWT-ENR recommended that an SNP station be included in the Licence for water use at the Colomac Camp, similar to SNP station 5-3 in the previous Licence (W2012L1-0002) for drinking water at the Damoti camp. Nighthawk responded stating that potable water is purchased commercially, and thus an SNP is not required. The Board noted that SNP station 5-3 is used to determine the potability of Damoti Lake water for camp use, when the camp is in operation. If Nighthawk is purchasing potable water commercially for the Colomac camp, then an SNP to determine the quality of water for drinking water should not be required.

3.5.6 Part E: Conditions Applying to Construction

Part E of the Licences address a variety of issues related to construction including designs, plans, notifications, as-built drawings, and requirement for Board approval. The main purpose of Part E is to

ensure that Construction is carried out with appropriate standards and proper oversight in order to facilitate good performance, avoid failures, and to protect the environment. The conditions in Part E were updated in each Licence, where appropriate, to be consistent with other water licences recently issued by the Board.

3.5.7 Part F: Conditions Applying to Modification

Part F of the Licence contains conditions outlining when and how Modification of the engineered structures may be authorized. The conditions also ensure that the Board and Inspector are kept informed and have the opportunity to require more information or reject the proposed Modification. The conditions in Part F were updated in each Licence, where appropriate, to be consistent with other water licences recently issued by the Board.

3.5.8 Part G: Conditions Applying to Waste Disposal

Part G of the Licence contains conditions outlining the requirements of Waste Disposal. The Board's approach to managing the deposit of waste to the receiving environment through conditions is described in the Boards' *Water and Effluent Quality Management Policy*.³⁷ The conditions in Part G were updated in each Licence, where appropriate, to be consistent with other water licences recently issued by the Board.

Effluent Quality Criteria (EQC) in Licence W2018L2-0002 (federal)

ECCC (ECCC comment 2) commented that it does not appear necessary for the W2018L2-0002 Licence to contain limits or to permit discharge to surface waters, given the scope of activities being applied for. ECCC recommended that the criteria be removed and discharge of wastewater to surface waters be restricted unless applied for by Nighthawk. ECCC further recommended that if Nighthawk applies to discharge wastewater to surface water, that there should be an added requirement that prior to discharging, Nighthawk should provide a water management plan outlining quantities, quality, and receiving environment details. Nighthawk agreed that these criteria should be removed. GNWT-ENR (GNWT-ENR comment 18) also noted that a Surveillance Network Program (SNP) is not required on federal lands since the waste deposited will be limited to camp grey water and drilling waste. GNWT-ENR noted however that although an SNP was not included in the Licence, EQC are included in the Licence and therefore an SNP station is required for the EQC to apply as a compliance point. GNWT-ENR recommended the Board include an SNP station where an EQC would apply for compliance purposes. Nighthawk responded stating they believe an SNP station for camp gray water is cost prohibitive and unnecessary, if discharging to a sump on land. Nighthawk expects that the Inspector will continue inspect sumps and make recommendations as required, as has occurred previously.

Nighthawk is proposing to discharge waste 100m from the ordinary high-water mark of any waterbody, with greywater filtered through a grease trap before being discharged into a man-made rock area, while drill water will be filtered to remove mud and suspended solids before being recycled or pumped into a natural depression. Where no natural depression can be found more than 100m from the ordinary high-water mark, an Inspector can approve an alternative natural depression of lesser distance, provided material do not enter a body of water.³⁸ No comments were received on Nighthawk's method of waste discharge. The Board believes that Nighthawk's proposed methods of waste management are appropriate and that an SNP for compliance purposes is not required. The EQC for activities on federal land has been removed from the Licence.

³⁷ See WLWB 'Policies and Guidelines' webpage for the [MVLWB Water and Effluent Quality Management Policy](#)

³⁸ See WLWB Registry for [W2018L2-0002 - Nighthawk - Water Licence Application - Oct 16 18.pdf](#)

EQC in Licence W2018L2-0003 (non-federal lands)

ECCC (ECCC comment 4) noted that discharges to the aquatic receiving environment from the Minewater Settling Pond (5-2) are subject to effluent quality criteria and are in line with the standards set out in the *Metal and Diamond Mining Effluent Regulations* (MDMER). ECCC commented that MDMER have been amended, and now have lower limits for parameters in discharges, and note that while this project is not subject to MDMER, lower limits consistent with this industry standard would be appropriate. ECCC recommended that the EQC be revised to limits which are consistent with MDMER. Nighthawk agreed that the EQC for the Minewater Settling Pond (SNP 5-2) should be revised to align with the amended MDMER limits for deleterious substances. Nighthawk noted however, that the pond is generally dry aside from periods of precipitation and snowmelt, with the discharge pipe being inactive since 1997. Nighthawk further stated the settling pond (and station SNP 5-2) will be backfilled and regraded as part of the closure plan for the site, as outlined in their Interim Closure and Reclamation Plan (ICRP), and will not retain water once regraded. Nighthawk recommended that the EQC be revised to the MDMER limits with the understanding that this monitoring station will be inactive after closure. The Board has revised the EQC parameters in the draft Licence to align with the limits set out in Schedule 4 of the MDMER.

Table 2: Parameters, current SNP Sample Limits, and MDMER Sample Limits

Parameter	W2012L1-0002 SNP – MAXIMUM CONCENTRATION OF ANY GRAB SAMPLE	MDMER - MAXIMUM AUTHORIZED CONCENTRATION IN A GRAB SAMPLE
Arsenic	1.0 mg/L	0.20 mg/L
Copper	0.6 mg/L	0.20 mg/L
Lead	0.4 mg/L	0.16 mg/L
Nickel	1.0 mg/L	0.50 mg/L
Zinc	1.0 mg/L	0.80 mg/L
Suspended Solids	30.0 mg/L	30.0 mg/L

3.5.9 Part H: Conditions Applying to Contingency Planning

The conditions under Part H of the Licence are to ensure a plan is in place in the event of a spill. The intent is to ensure that any spills are effectively controlled and cleaned up in order to prevent or minimize damage to the receiving environment. The conditions in Part H were updated in each Licence, where appropriate, to be consistent with other water licences recently issued by the Board.

The INAC-NWT inspector (INAC-NWT comment 6) recommended the addition of a condition that an incident must be immediately reported to the Inspector. Nighthawk responded stating no comment. The Licence states that in the event of an unauthorized discharge, Nighthawk shall immediately report the incident to the 24 Hour Spill Reporting Line, and report to an Inspector within 24 hours. The Board believes the existing condition is sufficient, as any incidents are immediately reported and the Inspector is informed in a short timeframe.

3.5.10 Part I: Conditions Applying to Closure and Reclamation

The requirements for the Closure and Reclamation Plan are outlined in Schedule 3. These requirements are consistent with other licences issued by the Board. The conditions in Part I were updated in each Licence, where appropriate, to be consistent with other water licences recently issued by the Board.

Licence W2018L2-0003 (non-federal lands)

ECCC (ECCC comment 3) commented on the Licence requirements for Nighthawk to submit a Closure and Reclamation Plan, noting that ECCC previously provided comments on Nighthawk's ICRP Version 3.1.^{39,40} ECCC recommended that the Licence condition pertaining to the Closure and Reclamation Plan include a date for submission of an updated plan, with a revised plan addressing outstanding concerns with the December 2016 plan. Nighthawk responded that Version 3.2 of the ICRP has been provided to the Board. The Board notes that Nighthawk's Version 3.2 of the ICRP was distributed for public review in early 2019.⁴¹

3.5.11 Schedule 1: Annual Report

The requirements for the Annual Report are outlined in Schedule 1. These requirements are consistent with other water licences. No comments were received on this Schedule in the public review.

3.5.12 Schedule 2: Conditions Applying to Security Deposits

The requirements for the Security Deposits are outlined in Schedule 1. These requirements are consistent with other water licences. The full discussion regarding security is addressed above in section 3.3.3. Board staff note that, as per *MVLWB/GNWT/INAC Guidelines for Closure and Reclamation Cost Estimates for Mines*,⁴² INAC and GNWT play a central role in estimating closure costs. Following comments received during the public review, the Board requires a security of \$21,614 for the W2018L2-0002 Licence, and \$110,078 for the W2018L2-0003 Licence.

The Board directs Nighthawk to post the securities within 120 days of the Issuance of the authorizations.

The Board directs Nighthawk to use unit costs provided in the RECLAIM model, and to submit supporting information when using specified costs or allowances, in future security estimates.

The Board recognizes the need for Nighthawk to assess and potentially refine the security estimate during the ICRP review.

3.5.13 Schedule 3: Conditions Applying to Water Use

The requirements for Water Use are outlined in Schedule 1. These requirements are consistent with other water licences. No comments were received on this Schedule in the public review.

3.5.14 Schedule 4: Conditions Applying to Construction

The requirements for Construction are outlined in Schedule 1. These requirements are consistent with other water licences. No comments were received on this Schedule in the public review.

³⁹ See WLWB Registry for [W2012L1-0002 - Nighthawk - ICRP - Version 3.1 - Review Summary and Attachments - Feb 12 18.pdf](#)

⁴⁰ See WLWB Registry for [W2012L1-0002 - Nighthawk - ICRP - Version 3.1 - Dec 31 16.pdf](#)

⁴¹ See WLWB Registry for [W2012L1-0002 - Nighthawk - Interim Closure and Reclamation Plan - Version 3.2 - Oct 31 18.pdf](#)

⁴² See WLWB website for [MVLWB/GNWT/INAC Guidelines for Closure and Reclamation Cost Estimates for Mines \(2017\)](#)

3.5.15 Surveillance Network Program (SNP) (W2018L2-0003 only)

The SNP is one of the tools used to monitor water quality. GNWT-ENR (GNWT-ENR comment 29) commented that the Licence specifies that all water or wastes from the project that enters the receiving environment shall meet the EQC. GNWT-ENR notes that oil and grease is included on the list of parameters, but the sampling parameters in the Annex does not include oil and grease. GNWT-ENR recommended the Board provide rationale for not including oil and grease as a sampling parameter, or to clarify that this was an oversight. Nighthawk responded stating no comment. The Board notes that oil and grease is a sampling parameter in the current W2012L1-0002 Licence, but is not included as a sampling parameter for any existing SNP station included in the Annex. The Board has revised the SNP to include Oil and Grease as a sampling parameter for SNP station 5-2 in the Licence W2018L2-0003.

3.6 Engagement Plan, Waste Management Plan, Incinerator Management Plan, Spill Contingency Plan, and Wildlife Mitigation and Monitoring Plan

3.6.1 Engagement Plan

The Board approves Version 3.0 of the Engagement Plan, and directs Nighthawk to include information on engagement specific to closure and reclamation in a revised version of the Engagement Plan. Nighthawk must work with Board staff to determine a timeline for this submission, which must be submitted no later than December 2020.

Nighthawk submitted Version 3.0 of its Engagement Plan. Comments and proponent responses received during the public review are described below. The Board believes that all other issues raised in the public review were addressed.

INAC-CARD (INAC-CARD comment 2) requested that they be included in Nighthawk's Engagement Plan, noting that the two parties are refining their lines of communication. Nighthawk stated they would prefer to keep the Engagement Plan focussed on agencies such as aboriginal organizations and governments (as per the MVLWB guidelines) but will discuss a communication strategy for the joint use of the Colomac site directly with CIRNAC. INAC-CARD further recommended that the Tłı̨ch̓ Government should be noted as lease holders and owners of the building "Big Blue", to which Nighthawk responded stating no comment. The Board believes the IRCP is the appropriate document for this information rather than the Engagement Plan, given the "Big Blue" building is located on the Colomac site.

GNWT-ENR (GNWT-ENR comment 34) commented that Appendix B lists the project summary and provides copies of previous letters sent to stakeholders, but that a copy of the stakeholder letter sent October 12, 2018 is not included. GNWT-ENR recommended the inclusion of the letter in Appendix B of the Engagement Plan. Nighthawk stated they would update the Engagement Plan and provide the letter. The Board notes that Nighthawk is not required to provide copies of written notification (such as stakeholder letters), but that the Board may request copies if disputes arise. The Board further notes that this information should be included in the Engagement Record, not the Engagement Plan. The Board's Engagement and Consultation Policy (the Policy) defines an engagement plan as "a forward-looking document that details times and approaches to engagement with the appropriate affected party over the life of the authorization or, for larger authorizations, over the life of the project. It should reflect the scope, scale, and context of the project", while the engagement record is

a “summary and log which details the engagement processes and outcomes between the proponent and the affected parties”.⁴³

Board staff (Board staff comment 2) noted that the Engagement Plan did not reference closure and reclamation, and recommended Nighthawk provide details regarding engagement specific to closure and reclamation. Nighthawk confirmed they would update the Engagement Plan to include engagement specific to the ICRP. The Board believes that Nighthawk should include information on engagement specific to closure and reclamation in the next version of the Engagement Plan.

3.6.2 Waste Management Plan

The Board approves Version 3.0 of the Waste Management Plan, direct Nighthawk to submit Version 3.1 of the Waste Management Plan by February 28, 2019. Nighthawk is to work with Board staff to determine an alternative submission date if this timeline cannot be met. Version 3.1 must include the revisions as discussed in section 3.6.2.

Nighthawk submitted Version 3.0 of its Waste Management Plan. Comments and proponent responses received during the public review are described below. The Board believes that all other issues raised in the public review were addressed. The Board requires an updated submission of the Waste Management Plan as described below.

GNWT-ENR (GNWT-ENR comment 5) recommended that if Nighthawk is using or generating hazardous wastes, they must register as a generator of hazardous wastes in the NWT and keep track of the disposal of hazardous waste. Nighthawk confirmed they would update the registration as a generator of hazardous waste under NTG386 (registered to Merc International Minerals Inc.), and stated the hazardous waste generator number NTG386 has been re-assigned from Merc International Minerals Inc. to Nighthawk Gold Corp. to reflect the company name change. The Board directs Nighthawk to confirm the updated registration as per Nighthawk’s response to GNWT-ENR recommendation (GNWT-ENR comment 5).

GNWT-ENR (GNWT-ENR comment 35) noted that the Waste Management Plan explains that AMC206 is a biodegradable product that will be used as a lubricant when drilling casing, and that the AMC206 MSDS sheet provided in Appendix B does not specify if the product is biodegradable. GNWT-ENR recommended Nighthawk confirm whether AMC206 is biodegradable. Nighthawk confirmed that AMC206 is biodegradable and non-toxic, and a product sheet will be added to the Waste Management Plan. The Board directs Nighthawk to make this addition, as per Nighthawk’s response to GNWT-ENR recommendation (GNWT-ENR comment 35).

GNWT-ENR (GNWT-ENR comment 37) recommended that Nighthawk provide additional descriptions or maps to show each site at smaller scale to identify the location for all waste management activities and the location of historical waste management activities. Nighthawk stated they would consider the inclusion of the information in the updated Waste Management Plan. The Board believes that maps and/or descriptions would help the Board and affected parties to better understand the activities related to Waste management undertaken on federal and non-federal land, and direct Nighthawk to include these in the Waste Management Plan.

GNWT-ENR (GNWT-ENR comment 38) recommended that Nighthawk include the *Waters Act* and Regulations in the listed acts, regulations, and guidelines in the Waste Management Plan. Nighthawk

⁴³ See WLWB website for the [MVLWB Engagement and Consultation Policy](#)

confirmed they would. The Board directs Nighthawk to include this reference in the Waste Management Plan.

The INAC-NWT Inspector (INAC-NWT comment 21) commented that the Waste Management Plan states that drill water held in natural depressions will be inspected 'regularly' to monitor for overflow and/or runoff. The INAC-NWT Inspector preferred a timeframe commitment be used, recommending Nighthawk to define the intended meaning of 'regularly'. Nighthawk confirmed they would update the Waste Management Plan to state that checks are completed daily when the drill is in use. The Board believes that daily checks to monitor for overflow and/or runoff while drilling is an appropriate frequency. The Board directs Nighthawk to confirm these checks.

The INAC-NWT Inspector (INAC-NWT comment 22) commented that the Waste Management Plan states that hazardous waste will not be stockpiled onsite and will be shipped offsite, while the sentence following states hazardous waste will be kept in a secure location. The INAC-NWT Inspector recommended Nighthawk confirm how often the hazardous waste will be shipped offsite. Nighthawk confirmed they would update the Waste Management Plan to state that hazardous wastes are not stored on site for longer than one week and transported out on charter flights as available. The Board directs Nighthawk to state this in the Waste Management Plan.

GNWT-ENR (GNWT-ENR comment 2) commented that if the Proponent is planning on using an incineration for this project, that the Proponent only use the waste streams (identified in the Municipal Solid Wastes Suitable for Open Burning document located on the GNWT-ENR website) may be open burned without the use of an approved incinerator. Nighthawk confirmed they would add this information to a revised version of the Waste Management Plan as open burning may be required for clean wood waste. The Board directs Nighthawk to include this information in the Waste Management Plan.

GNWT-ENR (GNWT-ENR comment 41) commented that the training program in the Spill Contingency Plan does not include a training schedule or a record of individuals who have received training, and recommended that both should be included in the training program and kept onsite. Nighthawk stated they would consider inclusion of a training schedule and record in the updated Waste Management Plan. The Board agrees that a training record should be kept onsite, and directs Nighthawk to confirm this in the Waste Management Plan.

Incinerator Management Plan

Nighthawk submitted Version 3.0 of its Incinerator Management Plan. Comments and proponent responses received during the public review are described below. The Board believes that all other issues raised in the public review were addressed. The Board believes that this information should be included within the Waste Management Plan for future submissions, and directs Nighthawk to include this as an appendix in future versions of the Waste Management Plan.

GNWT-ENR (GNWT-ENR comment 3) recommended that at any time, or in the event that the Proponent intends to incinerate any waste streams, the Proponent should provide to the Board "Incineration Management Strategies" that demonstrate that the device and procedures selected are suitable to the waste stream intended for incineration. GNWT-ENR stated that otherwise, harmful releases of toxic compounds, will result. GNWT-ENR recommended that these incineration strategies should meet the emission limits established under the Canada-Wide Standards (CWS) for Dioxins and Furans (CCME 2001), CWS for Mercury Emissions (CCME 2000), and the NWT Ambient Air Quality Guidelines. GNWT-ENR also recommended that these strategies include several specific details on how waste is managed and incinerated, such as descriptions of waste streams for incineration, and recycling and waste segregation plans that control waste entering the incinerator. Nighthawk

confirmed that the Incinerator Management Plan will be revised to include all the requested items, with the exception of the emission measurement methods, which they stated is not applicable as the Project incinerates less than 26 tonnes of waste per year. The Board believes that this is appropriate, given Nighthawk's Waste Management Plan states that only combustible, non-hazardous waste will be incinerated. The Board believes that the Incinerator Management Plan should be revised to include the information, as stated by Nighthawk in the response to GNWT-ENR, and directs Nighthawk to revise the Incinerator Management Plan to include this information.

GNWT-ENR (GNWT-ENR comment 4) also recommended that residual ash from the incineration of non-segregated waste must be tested prior to disposal to ensure it meets the criteria specified in the NWT Environmental Guidelines for Industrial Waste Discharges. GNWT-ENR stated that incineration ash can be contaminated with toxic compounds and by-products such as dioxins and furans and should therefore be tested to ensure that it is disposed of in an appropriate and approved manner. Nighthawk confirmed that the Incinerator Management Plan will be revised to state that incinerator ash is tested before being transported from site and disposed by KBL Environmental Inc. The Board believes that this is appropriate, and directs Nighthawk to revise the Incinerator Management Plan to include this information.

3.6.3 Spill Contingency Plan

The Board approves Version 3.0 of the Spill Contingency Plan, direct Nighthawk to submit Version 3.1 of the Spill Contingency Plan by February 29, 2019. Nighthawk is to work with Board staff to determine an alternative submission date if this timeline cannot be met. Version 3.1 must include the revisions as discussed in section 3.6.3.

Nighthawk submitted Version 3.0 of its Spill Contingency Plan (SCP). Comments and proponent responses received during the public review are described below. The Board believes that all other issues raised in the public review were addressed. The Board directs Nighthawk to revise the SCP to address the items discussed below.

GNWT-ENR (GNWT-ENR comment 39) recommended updating the figures in the SCP to align with the figures described in the site descriptions, as they did not match. Nighthawk confirmed this would be corrected in an updated SCP. The Board agrees this should be updated.

GNWT-ENR (GNWT-ENR comment 40) commented that there were tables missing from the Spill Contingency Plan which address spill events at the Damoti and Diversified sites, and that other tables in the document indicate that there is normally zero fuel stored at either site. GNWT-ENR recommended Nighthawk clarify if there is the potential for spill events at the Damoti and Diversified sites and to update the SCP accordingly. Nighthawk confirmed this would be updated in a revised SCP. The Board agrees this should be updated.

GNWT-ENR (GNWT-ENR comment 42) and the INAC-NWT Inspector (INAC-NWT comment 25) commented that the SCP explains that waste liquid hydrocarbons will be incinerated, or removed from site and transported to an acceptable disposal facility. However, the Incinerator Management Plan states that hydrocarbons and hydrocarbon containing products will not be incinerated. GNWT-ENR and the INAC-NWT Inspector recommended Nighthawk clarify this, with GNWT-ENR recommending clarifications to either the SCP or Incinerator Management Plan accordingly. Nighthawk stated that no waste hydrocarbons will be incinerated, and this would be corrected in an updated SCP. The Board believes this should be corrected.

GNWT-ENR (GNWT-ENR comment 43) commented that Nighthawk should follow best practices for fuel storage and spill containment during project activities. GNWT-ENR recommended that to assist in spill contingency planning, information is provided in the EPA Spill Contingency Planning and Reporting Regulations, and if further information is needed, ENR can directly aid in the development of the plan. Nighthawk stated the SCP would be updated to include this information. The Board believes that the SCP should include a reference to the Regulations, as recommended by GNWT-ENR.

The GNWT-Lands Inspector (GNWT-Lands comment 3) recommended the SCP be updated to include the GNWT Inspector contact information, as some operations will occur on non-federal land. Nighthawk confirmed the SCP would be updated to include this. The Board believes that the SCP should also include a map that clearly indicates where the federal and non-federal lands are, so Nighthawk can determine which Inspector to contact in the event of a spill. The Board also notes that section 2.7 (site description) states that a map of Damoti illustrating the location of the storage tanks is provided in figure 3. However, figure 3 is a map of the Colomac camp, and there is no Damoti site plan included in the SCP. The Board believes this should be corrected in the updated SCP.

The GNWT-Lands Inspector (GNWT-Lands comment 5) and the INAC-NWT Inspector (INAC-NWT comment #26) recommended updating and including the Immediately Reportable Quantities table in the SCP. Nighthawk confirmed the SCP would be updated to include this information. This Immediately Reportable Quantities table lists substances and the quantity which could be spilled before the NWT 24 hour spill line is contacted (e.g. if any amount of explosives is spilled, Nighthawk would contact the NWT Spill Line immediately). The Board believes this table should be included in the updated SCP.

3.6.4 Wildlife Mitigation and Monitoring Plan

The Board requests Nighthawk to work collaboratively with the GNWT-ENR and the Wek'èezhìi Renewable Resources Board on wildlife management aspects.

Nighthawk submitted Version 3.0 of its Wildlife Mitigation and Monitoring Plan. Comments and proponent responses received during the public review are described below. The Board believes that all other issues raised in the public review were addressed. GNWT-ENR (comment 13) commented that the project area overlaps with the ranges of the following NWT-listed and/or pre-listed species:

- Boreal Caribou – Threatened in the NWT
- Barren-ground Caribou – Threatened in the NWT
- Grizzly Bear – Special Concern in the NWT
- Little Brown Myotis (bat) – Special Concern in the GNWT
- Wood Bison – Threatened in the NWT

GNWT-ENR recommended that although the project overlaps with the range(s) of the species listed above, ENR is of the opinion that the scope, nature, areal extent, scale and/or timing of the proposed project are such that the likelihood of impacts to NWT-listed or pre-listed species at risk is minimal.

GNWT-ENR (comment #8 11) submitted several recommendations for Nighthawk's Wildlife Management Plan regarding animal habitats:

1. Conduct pre-activity surveys within 800m of the project footprint to identify active bear dens;

2. Implement and maintain an 800m exclusion zone when an active bear den is detected or suspected;
3. Contact ENR to discuss alternative mitigation options if a bear den or exclusion zone would halt part or the entire program;
4. To not disturb beaver lodges, muskrat push-up and hibernacula if encountered.

Nighthawk stated they would discuss options to protect bear dens with ENR and update the Wildlife Mitigation and Monitoring Plan accordingly. Nighthawk also confirmed that known wolf and bear dens would be added to the Plan, along with the above recommendations. The Board notes that wildlife protection is out of the scope of the Board's mandate and requests Nighthawk to work collaboratively with the Wek'èezhìi Renewable Resources Board and GNWT-ENR on wildlife management aspects.

GNWT-ENR (GNWT-ENR comment 13) recommended that Nighthawk store all food, waste, washed recyclables and debris that may attract wildlife within sealed animal proof containers until disposal. Nighthawk stated their methods of storage would be clarified in an updated Wildlife Mitigation and Monitoring Plan. GNWT-ENR (GNWT-ENR comment #14) also recommended these containers are cleaned once emptied to minimize the attraction of wildlife. Nighthawk stated this is their current practice and will be added to the Plan. The Board notes that these issues concerning wildlife and containers are addressed by the Waste Management Plan and are standard conditions (conditions 50 and 51) in the Permit W2018C0007.

Signed the 15th of February, 2018, on behalf of the Wek'èezhìi Land and Water Board



Witness



Joe Mackenzie
Chair, Wek'èezhìi Land and Water Board