



Water Resources Division
Resource Management Directorate
Nunavut Regional Office
P.O. Box 100
Iqaluit, NU, X0A 0H0

Your file - Votre référence
2BE-KGP1823
Our file - Notre référence
GCdocs # 97226209

August 20, 2021

Mr. Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B 1J0
sent via e-mail: licensing@nwb-oen.ca

**Re: Crown-Indigenous Relations and Northern Affairs Canada's Comment on
Solstice Gold Corp. Application for Amendment of Type B Water Licence No.
2BE-KGP1823**

Dear Mr. Dwyer,

Thank you for your August 6, 2021 invitation to review the Type B water licence 2BE-KGP1823 amendment application, submitted by the Solstice Gold Corp. on July 28, 2021.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) examined the application pursuant to its mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Crown-Indigenous Relations and Northern Affairs Act*. Please find CIRNAC comments and recommendations in the attached Technical Memorandum.

CIRNAC appreciates the opportunity to participate in this review. If there are any questions, please contact me at (867) 975-4738 or vincent.okonkwo@canada.ca

Sincerely,

Vincent Okonkwo
Environmental Assessment Coordinator



Technical Review Memorandum

Date: August 20, 2021

To: Richard Dwyer, Manager of Licensing, Nunavut Water Board

From: Vincent Okonkwo, Environmental Assessment Coordinator, CIRNAC

Subject: Crown-Indigenous Relations and Northern Affairs Canada's Comment on Solstice Gold Corp. Application for Amendment of Type B Water Licence No. 2BE-KGP1823

Region: ☐ Kitikmeot ☒ Kivalliq ☐ Qikiqtani

A. BACKGROUND

The Kahuna Gold Project is located on Crown land and Inuit Owned Land ("IOL") in the Kivalliq Region of Nunavut. The Project is approximately 35 km southwest of Igluligaarjuk (Chesterfield Inlet) and 30 km northeast of Kangiqliniq (Rankin Inlet).

The Project comprises 72 mineral claims (79,567.46 ha) held 100% by Solstice Gold Corp. ("Solstice") and 19 mineral claims held jointly with Kodiak Copper Corp. ("Kodiak," formerly Dunnedin Ventures Inc.).

Previous work on the Project included prospecting, geological mapping, geochemical sampling, geophysical surveys and a six-hole diamond drilling program. Solstice does not currently have a camp permitted as the previous Solstice field programs were either supported out Kodiak's Kahuna Camp (2018), Rankin Inlet (2019) or from a small temporary fly camp (2020).

Solstice Gold Corp. is proposing to amend their Type B water licence to increase their daily water usage from 200 m³/day to 299 m³/day to allow for extra 89 m³/day for drilling use and 10 m³/day of water for camp use and establishment of a 40-person camp.

CIRNAC provides the following comments and recommendations pertaining to the Type B Water Licence 2BE-KGP1823 application for amendment submitted July 28, 2021.



Table 1: Summary of Recommendations

Recommendation Number	Subject
R-01	Summary of Water Use and Waste Disposal Activities in 2020 Annual Report
R-02	Quantity of Water Used for Drilling till Date Since Application for Amendment
R-03	Water Source and Waste Deposit GPS Locations
R-04	Post Closure Site Monitoring Duration
R-05	Kodiak Camp Purchase Discussions

B. RESULTS OF REVIEW

1. Summary of Water Use and Waste Disposal Activities in 2020 Annual Report

Comment

In section 7 of the 2020 annual report, the licensee stated that:

“A low impact 2 person single tent campsite was established at Lat 63° 3’ 45” Long-91 25’ 44” (2020 Camp, Figure 1) to allow the prospecting and mapping effort to proceed with only periodic helicopter support”, “Water was drawn directly from the lake” and “Minimal quantities of water, used for cooking and drinking, were withdrawn from the lake adjacent to the camp site.”

As per Part B, Item 2 terms and condition of the Type B Water Licence 2BE-KGP1823, the licensee is required to report the summary of the water use and waste disposal activities in the annual report.

It appears the licensee did not provide the following information in the 2020 Annual Report:

- Daily quantity of water used for domestic and other purposes during exploration activities;
- Amount of waste disposed on-site; and
- Quantity of waste backhauled to approved facility for disposal.

Licensee is seeking to increase daily water usage to 299 m³/day which is close to the borderline in transition to Type A water licence criteria of above 300 m³/day usage. Reporting summary of previous water usage in the annual reports will enable regulators adequately monitor the quantity of water used on site.



Recommendation

(R-01) CIRNAC recommends that the licensee report quantity of:

- Water used on site for domestic and other purposes during exploration activities in the 2020 annual report and subsequent reports;
- Waste disposed on site; and
- Waste backhauled to approved facility for disposal.

2. Quantity of Water Used for Drilling till Date Since Application for Amendment

Comment

In the Non – Technical Summary for the Kahuna Gold Property application document for amendment, the licensee stated that:

“Drilling may then commence mid-March to mid-May to test targets below lakes with drilling of land targets commencing mid-June through September.”

CIRNAC understanding from the above statement is that land drilling may have commenced in mid – June and water licence amendment application was received by the Nunavut Water Board(NWB) on July 28, 2021. An extra 89 m³/day of water is sort in the water licence amendment for drilling purposes. It is unclear if Licensee has commenced drilling in mid – June as stated and how much water is being used on daily basis since the drilling started.

It will be helpful if the licensee confirm if the drilling started as propose and provides the record of daily water use for drilling from the time of amendment application till date.

Recommendation

(R-02) CIRNAC recommends that the licensee clarify:

- Land drilling commenced in mid – June as stated in the application for amendment; and
- Daily quantity of water used for drilling since amendment application till date.

3. Water Source and Waste Deposit GPS Locations

Comment

In Item 13 of the application document, Licensee confirmed that the proposed amendment will change the source of the water. It went further to state that *“numerous unnamed water sources will be used for drilling and camp use which will be extracted from the unnamed lake approximately 520 m to the northeast of the proposed camp location and made reference to a map 20210101 - Solstice Kahuna Project Description Figure”* as an indication to the locations of the unnamed water sources.



The licensee also confirmed that: *“Water used for camp and drilling will not be returned directly to the source but be released into an appropriate natural depression or properly constructed sump, positioned a minimum of 31 m from the normal high-water mark of any waterbody, to allow for slow infiltration into the soil.”*

Part J, Items 2 and 3 terms and condition of the Type B Water Licence 2BE-KGP1823 states that:

“The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where sources of water are utilized for all purposes.”

“The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where Wastes associated with camp operations and drilling operations are deposited.”

The referenced map neither show the GPS co-ordinates of the locations of the unnamed water sources where the drilling and camp water will be extracted nor the GPS co-ordinates of the locations where wastes are deposited as stated in Part J, Item 2 and 3 terms and condition of the Type B Water Licence 2BE-KGP1823 respectively.

CIRNAC is of the opinion that the Licensee provides the GPS co-ordinates locations of these unnamed sources of water extraction in the map and GPS co-ordinates locations where wastes are deposited as per the terms and condition of the Type B Water Licence. This information enables regulators to adequately review the amendment application to ensure that the quality and capacity of the water sources are maintained.

Recommendation

(R-03) CIRNAC recommends that the Licensee:

- Provide the GPS co-ordinate locations of the unnamed water sources in the map where drilling and camp water will be extracted;
- Provide the GPS co-ordinate locations where wastes associated with camp and drilling operations are deposited; and
- Ensure that water source capacity or level is maintained all through the withdrawal process as the water withdrawn will be not be returned to the source.



4. Post Closure Site Monitoring Duration

Comment

In section 6 of the Abandonment and Restoration Plan (ARP), the licensee states that:

“The monitoring will continue as long as the regulating bodies deem it necessary.”

The above statement is not clear on how long site monitoring will last after closure. Post closure monitoring of the site shall be continued until the global objectives of physical and chemical stability, as well as future use and aesthetics of the site are achieved. These site stability conditions inform regulatory decisions on the duration of post closure monitoring. CIRNAC and other regulatory bodies work based on responsibilities mandated by relevant Acts, regulations and policies to provide recommendations to the NWB on licensee requirements for reclamation. The ARP should clearly indicate the achievement of site stability as the reclamation objective upon which monitoring can be discontinued.

Recommendation

(R-04) CIRNAC recommends that licensee update the ARP to include that post closure monitoring of the site will continue until global objectives of physical and chemical stability, and future use and aesthetics are achieved.

5. Kodiak Camp Purchase Discussions

Comment

It is mentioned in the amendment application non – technical summary document that Kodiak had the intention to remove the Kodiak camp from the field close to the proposed site of the new 40-person camp capacity. It is reported that Solstice has engaged Kodiak in discussion for the potential takeover of the Kodiak camp or purchase some materials from Kodiak for use at the new camp location before the removal of the Kodiak camp.

There is a conflicting statements in the application for the water licence amendment and Nunavut Planning Commission (NPC) Conformity Determination. In item 9, of the water licence amendment application document, it states that:

“The proposed changes in these documents include the addition of a new Solstice camp adjacent to the Kahuna camp or alternatively Solstice acquiring the Kahuna camp.”

While it states in NPC conformity determination document item 2 - Summary of Modification that:



“A new Solstice exploration camp in addition to the existing Kodiak camp.”

These two statements appears to be confusing as one states that acquiring Kodiak camp is an alternative to erecting a new 40-person camp while the other mention that 40-person camp is in addition to the existing Kodiak camp.

It is unclear if the Licensee still plans to establish a new 40-person camp in close proximity to the Kodiak camp or forgo the plans for new camp if it ends up purchasing the camp from Kodiak. It is also not clear if the two name used interchangeably for the existing camp are the same. The camp was referred to Kahuna camp in some documents while others has it as Kodiak camp.

It will be helpful to be consistent in the camp names as to avoid confusion during review process.

Recommendation

(R-05) CIRNAC recommends that Licensee clarify if:

- A new 40-people capacity camp will still be established if the takeover Kodiak camp discussions with Kodiak go through; and
- Kahuna camp is the same facility as Kodiak camp.

C. REFERENCES

Department of Crown-Indigenous Relations and Northern Affairs Act. (2020).

Nunavut Waters and Nunavut Surface Rights Tribunal Act. (2016).

Nunavut Water Board, December 17, 2018:Type B Water Licence No: 2BE-KPG1823, P 4 - 5