



Water Resources Division
Resource Management Directorate
Nunavut Regional Office
P.O. Box 100
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Your file - Votre référence

Our file - Notre référence
GCDOCS# 97407996

August 26, 2021

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

**Re: Crown-Indigenous Relations and Northern Affairs Canada Review of Sabina's
Goose Bulk Fuel Tank Design Report and Issued for Construction Drawings for
water licence 2AM-BRP1831**

Dear Mr. Dwyer,

Thank you for the August 18, 2021 invitation to Sabina's Goose Bulk Fuel Tank Design
Report and Issued for Construction Drawings for water licence 2AM-BRP1831.

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.

If there are any questions or concerns, please contact me at (867)975-4550 or
Andrew.Keim@canada.ca.

Sincerely,

Andrew Keim,
Water Resources, Nunavut Regional Office
Crown-Indigenous Relations and Northern Affairs Canada
Andrew.Keim@Canada.ca / Tel : (306) 501-4047



Technical Review Memorandum

Date: August 26, 2021

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

From: Andrew Keim, Water Resources, CIRNAC

Subject: Crown-Indigenous Relations and Northern Affairs Canada Review of Sabina's Goose Bulk Fuel Tank Design Report and Issued for Construction Drawings for water licence 2AM-BRP1831

Region: ☒ Kitikmeot ☐ Kivalliq ☐ Qikiqtani

A. BACKGROUND

On August 17, 2021 Sabina Gold & Silver Corp. (Sabina) submitted, for the consideration of parties, documents related to Sabina's Goose Bulk Fuel Tank Design Report, and issued for construction drawings for water licence 2AM-BRP1831. Sabina also provided notes on test pit investigations from SRK's field investigation at Back River.

The Back River Project (BRP) includes four open pits and four underground mines, an airstrip and mill at the Goose property, a marine laydown area on Bathurst Inlet, and a 160 km long winter road. The most recent amendment under review by the Nunavut Water Board requests authorization for increased water use, increased depth at the Umwelt underground mine, the extension and expansion of airstrips and the addition of a new tailings facility.

In accordance with Sabina's Type A Water Licence (No. 2AM-BRP1831), Sabina has submitted to the Nunavut Water Board (the Board) for review, at least sixty (60) days prior to Construction, Sabina's Goose Bulk Fuel Tank Design Report and Issued for Construction Drawings for water licence 2AM-BRP1831. It is noted that in 2019 Sabina submitted the Back River Project Fuel Storage Tanks and Containment Facilities Design Report and Drawings" (Report) as a requirement of Part D, Item 2 of Water Licence 2AM-BRP1831. This report was subsequently accepted by the Board on May 23, 2019.

CIRNAC provides the following comments and recommendations pertaining to the application submitted August 2021.

Documents reviewed as part of this submission can be found in Table 1 of Section B. Detailed technical review comments can be found in Section C.



B. DOCUMENTS REVIEWED

The following table (Table 1) provides a summary of the documents reviewed and referenced under the submission.

Table 1: Documents Reviewed and Referenced

| Document Title | Author, File No., Rev., Date |
|---|---|
| BACK RIVER PROJECT Fuel Storage Tanks and Containment Facilities –Goose Site Design Report and Drawings | Sabina Gold and Silver Corp. – Plan undated |
| Back River Test Pit Investigation July 2021 Summary | SRK Consulting – July 27,2021 |
| 2AM-BRP1831 Water License | Nunavut Water Board, 2018 |

C. RESULTS OF REVIEW

1. Submission of Supporting Documents

Comment:

In accordance with the Sabina's Type A Water Licence (No. 2AM-BRP1831), at least sixty (60) days prior to construction, Sabina provided to the Board for review: , final design and construction drawings and a detailed report for the bulk fuel storage facilities (Part D, Item 2c).

On August 20, 2021, CIRNAC conducted a review of the documents provided by Sabina in their submission to the Board. The report and design drawings, all stamped by the Engineer of Record, included a description of the scope of work and a list of codes and regulatory standards which the company would be required to meet in the construction of the tanks. .

The purpose of the report is to seek the approval of the Board for the construction of one field-erected 10 million litre bulk fuel tank during the 2021 field season. This will be followed with the further construction of four additional tanks in later years. The site preparation and construction plans for the secondary containment were also included in the field notes submitted by SRK consulting.

Recommendations:



CIRNAC, having reviewed the documents, has the following recommendations;

- When submitting detailed drawings and plans it is incumbent upon the company to submit the latest versions of drawings to be used in the design and construction of the facility.
- While not specifically addressed in the report or design drawings it is required that all fuel storage and transfer areas are lined with an impermeable layer to prevent loss in the event of a spill or uncontrolled release.
- The use of crush material in the construction of the laydown, ad and areas of separation including the lined berm walls must be made up of only non-acid generating materials. Ongoing testing during construction must be maintained to ensure that the possibility of leaching from acid generating rock or minerals is minimized throughout the construction phase.

After reviewing the design report and contacting the licensee directly to seek input on the construction of the tank; Crown-Indigenous Relations and Northern Affairs Canada is satisfied that the design report for the fuel tank farm and the containment facilities contains all relevant information and therefore have no concerns with the report.