



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

Your file - Votre référence
2BE-SKG----
Our file - Notre référence
GCDocs# 109996272

February 16, 2023

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's Review of the New
Licence Application for South Kitikmeot Gold Project, Type B Water Licence No.
2BE-SKG----**

Dear Richard,

Thank you for the February 3, 2023 invitation to review the referenced licence application, submitted by Viridis Miners and Mining Inc., for Type B Water Licence No. 2BE-SKG----

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) 975-3877 or Joyce.Demers@rcaanc-cirnac.gc.ca or Andrew Keim at (867) 975-4550 or Andrew.Keim@rcaanc-cirnac.gc.ca.

Sincerely,

Joyce Demers, B.Sc.,
Industrial Coordinator



Technical Review Memorandum

Date: February 16, 2023

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

From: Joyce Demers – Industrial Coordinator, CIRNAC

Subject: Crown-Indigenous Relations and Northern Affairs Canada's Review of the New Licence Application for South Kitikmeot Gold Project, Type B Water Licence No. 2BE-SKG----

Region: ☒ Kitikmeot ☐ Kivalliq ☐ Qikiqtani

A. BACKGROUND

Viridis Mining & Minerals Inc (Viridis), is an Australian based company who acquired 100% the South Kitikmeot Gold Project. This project is located in the Kitikmeot region of Nunavut 424 km southeast from Kugluktuk, 400 km northeast from Yellowknife, 145 km east-southeast of Lupin Mine, 50 km east from the nearest part of the Tibbitt to Contwoyto winter road as well as located near the Back River Gold project. This project spans roughly 11,000 ha and has seven claim blocks called: Hiqiniq, Ujaraq, Gold Bug, Esker, Bling, Uist, and Qannituq. These seven claim blocks have been explored since the 1980's with diamond drilling occurring on the Esker claims in the 1990's.

Viridis is applying for a 7 year new type B water license for exploration and camp use, in order to re-evaluate previously identified gold targets and to identify new ones, under water license number 2BE-SKG----.

The exploration phase, which will be managed by Aurora Geosciences, may include: geophysical surveys (ground and aerial), geochemical and geological sampling, test pitting, trenching and drilling both on land and on ice using diamond and/or rotary air- blast/reverse circulation drilling, geological mapping, channel sampling, prospecting, on-ice drilling, environmental and heritage resources baseline studies.

The camp will be capable of holding up to 60 people. The final camp location has not yet been determined however, for at least the first year, Viridis will be establishing a camp near the historical Esker lake camp located at 65° 01' 50.68354500" N Lat and 108° 38' 17.14112195" W long. Viridis is planning on having satellite work sites or Fly Camps, which have not yet been identified for crew support and safety. Viridis states that once they have determined the location of the camp site(s) they will provide further documentation.

The main camp can be accessed via helicopter, fixed wing float or ski plane from either Yellowknife or Kugluktuk and by winter road, after it is constructed. The Esker claim block



is roughly at the geographic center of the project with geographical location 65°01' N 108° 01' W.

CIRNAC provides the following comments and recommendations pertaining to the application package. A summary of the subjects of recommendations can be found in Table 1. Documents reviewed as part of this submission can be found in Table 2 of Section B. Detailed technical review comments can be found in Section C.

Table 1: Summary of Recommendations

Recommendation Number	Subject
R1	Treatment of Water from Secondary Containment
R2	Excavated Materials Backfilled Material

B. DOCUMENTS REVIEWED AND REFERENCED

The following table (Table 2) provides a list of the documents reviewed under the submission and reference during the review.

Table 2: Documents Reviewed and Referenced

Document Title	Author, File No., Rev., Date
221124 2BE-SKG---- 221019-149880NPC Conformity Determination-IA2E	Nunavut Planning Commission, October 18, 2022
221124 2BE-SKG---- Closure&ReclamationPlan-IMLE	Viridis Mining & Minerals, November 2022
221124 2BE-SKG---- EngagementPlan-IMLE	Viridis Mining & Minerals, November 2022
221124 2BE-SKG---- EnviroHeritageResourcesProtectionPlan-IMLE	Viridis Mining & Minerals, November 2022
221124 2BE-SKG---- Figure1_ProjectArea-Extents-IMLE	Viridis Mining & Minerals, November 2022
221124 2BE-SKG---- ListOfOfficers_Aus-IMLE	Australian Securities & Investments Commission, September 2022
221124 2BE-SKG---- ProjectDescription-IMLE	Viridis Mining & Minerals, November 2022
221124 2BE-SKG---- SpillResponsePlan-IMLE	Viridis Mining & Minerals, November 2022
221124 2BE-SKG---- Summary English-IMLE	Viridis Mining & Minerals, N.D.
221124 2BE-SKG---- Supplemental Information Guide-IMLE	Bluestar Cold Corp, June 2017
221124 2BE-SKG---- TypicalProjectComponents-IMLE	Viridis Mining & Minerals, N.D.
221124 2BE-SKG---- VIRIDIS_SouthKitGold_AuthorizationLetter-IMLE	Viridis Mining & Minerals, N.D.



Document Title	Author, File No., Rev., Date
221124 2BE-SKG---- VIRIDIS_SouthKitGold_CertificateOfIncorporation_A us-IMLE	Australian Securities and Investments Commission, November 2021
221124 2BE-SKG---- VIRIDIS_SouthKitGold_CertificateOfIncorporation_O fficers_Can-IMLE	BC Registry Services, January 26, 2022
221124 2BE-SKG---- VIRIDIS_SouthKitGold_EngagementLog-Summary- IMLE	Viridis Mining & Minerals, November 2022
221124 2BE-SKG---- VIRIDIS_SouthKitGold_Financial-IMLE	Viridis Mining & Minerals, June 30, 2022
221124 2BE-SKG---- VIRIDIS_SouthKitGold_FXAssessment-IMLE	Viridis Mining & Minerals, N.D.
221124 2BE-SKG---- WasteManagementPlan-IMLE	Viridis Mining & Minerals, November 2022
221130 2BE-SKG---- Supplemental Information Guide-IMLE	Viridis Mining & Minerals, November 4, 2022
230131 2BE-SKG---- Updated Water Licence Application-ILAE	Viridis Mining & Minerals, November 2022
230202-22EN057-Cvr Ltr Re Screening Decision Report-OMAE	Nunavut Impact Review Board, February 2, 2023
230202-22EN057-Notice of Release of SDR-OA2E	Nunavut Impact Review Board, February 2, 2023
230202-22EN057-Screening Decision Report-OT5E	Nunavut Impact Review Board, February 2, 2023
230203 2BE-SKG---- New Water Licence Appilcation Notice-OMLE	Nunavut Water Board, February 3, 2023
230203 2BE-SKG---- New Water Licence Application-OMLE	Nunavut Water Board, February 3, 2023



C. RESULTS OF REVIEW

1. Treatment of Water from Secondary Containment

Comment:

The applicant states in the waste management plan that water from the secondary containment units installed under stored fuel barrels will be treated with either a carbon filter and or an oil water separator. The concern is that a carbon filter might not be sufficient in removing the contamination from the water therefore may lead to contamination ending up in a waterbody if it is discharged less than 31 meters away from any normal high watermark of any waterbody.

Recommendation:

(R-01) CIRNAC recommends that the applicant state how they will test the treated water, from the secondary containment units, to confirm that it is safe to be will be deposited into the environment, prior to discharge.

2. Excavated Materials Backfilled Material

Comment:

The spill management plan indicates that the excavated areas will be backfilled with available soil, gravel, sand or bentonite, but does not indicate where these materials will be taken from.

Recommendation:

(R-02) CIRNAC recommends that the applicant clarify that the source and document the location of backfill materials selected prior to backfilling.