

5. TYPE OF UNDERTAKING (A supplementary questionnaire must be submitted with the application for undertakings listed in "bold")

- | | |
|--|--|
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Remote/Tourism Camps |
| <input type="checkbox"/> Mine Development | <input type="checkbox"/> Municipal |
| <input type="checkbox"/> Advanced Exploration | <input type="checkbox"/> Power |
| <input type="checkbox"/> Exploratory Drilling | <input checked="" type="checkbox"/> Other (describe): <u>Amendment to operational facilities at exploration camp</u> |

6. WATER USE

- | | |
|---|--|
| <input checked="" type="checkbox"/> To obtain water | <input type="checkbox"/> To divert a watercourse |
| <input type="checkbox"/> To modify the bed or bank of a watercourse | <input type="checkbox"/> Flood control |
| <input type="checkbox"/> To alter the flow of, or store water | <input type="checkbox"/> Other (describe): |
| <input type="checkbox"/> To cross a watercourse | |

Water will be required to flush the toilets which form an integral part of the new sewage treatment system.

7. QUANTITY OF WATER INVOLVED (litres per second, litres per day or cubic metres per year, including both quantity to be used and quality to be returned to source)

Previous water consumption estimates per man-day were over-estimated, and the overall water intake following implementation of the new sewage system should increase by approximately 40 litres per day per person (0.04 m³/day per person). At anticipated peak camp capacity of 60 people this will equate to an additional water consumption of 2.4 m³ per day. Total water consumption will not exceed 150 cubic metre per day as per the current permit limits.

We anticipate that the current Windy Lake water intake system will be sufficient to meet these needs.

8. WASTE (for each type of waste describe: composition, quantity, methods of treatment and disposal, etc.)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Sewage | <input type="checkbox"/> Waste oil |
| <input type="checkbox"/> Solid Waste | <input checked="" type="checkbox"/> Greywater |
| <input type="checkbox"/> Hazardous | <input type="checkbox"/> Sludges |
| <input type="checkbox"/> Bulky Items/Scrap Metal | <input type="checkbox"/> Other (describe): |

Septic:

The ROTODISK treatment system will be installed immediately down slope of the camp to facilitate gravity feed from the washroom facilities. A discharge pipe will be installed which transports treated effluent from the ROTODISK to a new intermediate staged holding tank located immediately east of the camp generators. Sludge generated by the ROTODISK will be periodically collected into 45 gallon drums and transported to Boston Camp for disposal into a bentonite lined holding pond which is currently used for disposal of Boston ROTODISK sewage sludge.

Non Septic Greywater: *There is no anticipated change to the previous estimate of 6000 litres/day of greywater from the kitchen and washing facilities. Currently, greywater is discharged untreated approximately 122 metres from Windy Lake, via a small sealed holding tank located between camp and lake. The current greywater plumbing and discharge system will be modified to discharge the greywater into the new holding tank located immediately east of the camp generators.*

Final Discharge: *A pump located at the new holding tank located immediately east of the camp generators will pump the treated effluent and greywater to a point located over the ridge east of camp. The discharge will then flow northward over land behind the bedrock ridge east of Windy Camp where it will be subject to further land treatment. The UTM coordinates for the outflow will be 432577E, 7550846N, elevation 62 metres (± 4m estimated GPS error).*

All influent and effluent discharge lines will be heat traced and sealed to prevent accidental leakage/discharge. The details regarding the capacity of the new holding tank, pumps and pipes and other related systems are still being developed.

The HBJV intends to commence construction of these facilities about July 15, 2000. The facilities will not be operational until approximately February 2001. Previously, septic wastes were deposited into latrine pits. These latrines will be maintained as backup facilities.

9. PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING (give name, mailing address and location; attach if necessary)

No other persons or properties will be affected by this undertaking.

Land Use Permit

DIAND ☐ Yes ☐ No If no, date expected _____

Regional Inuit Association ☒ Yes ☐ No If no, date expected _____
Current Class 3 License: KTL399C028 issued March 8, 2000.

Commissioner ☐ Yes ☐ No If no, date expected _____

10. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES (direct, indirect, cumulative impacts, etc.)

No significant negative environmental impacts are anticipated as a result of this work.

NIRB Screening ☐ Yes ☐ No If no, date expected _____

11. CONTRACTORS AND SUB-CONTRACTORS (name, address and functions)

*The ROTODISK installation and testing will be completed by representatives of the manufacturer: CMS Group Inc.
Plumbing and tanks will be installed by HBJV personnel.*

12. STUDIES UNDERTAKEN TO DATE (list and attach copies of studies, reports, research, etc.)

Please refer to Supplementary Questionnaire submitted with original permit application.

13. THE FOLLOWING DOCUMENTS MUST BE INCLUDED WITH THE APPLICATION FOR THE REGULATORY PROCESS TO BEGIN

Supplementary Questionnaire (not requested) ☐ Yes ☒ No If no, date expected _____

Inuktitut/English Summary of Project ☐ Yes ☒ No If no, date expected: *Please advise
ASAP if an Inuktitut translation is required
for this amendment*

Application fee \$30.00 (c/o of Receiver General for Canada) ☒ Yes ☐ No If no, date expected _____

14. PROPOSED TIME SCHEDULE

☐ Annual (or) ☒ Multi Year

Start Date: *Ongoing activities* Completion Date: _____

Hugh R. Wilson
Name (Print)

Manager, Environmental Affairs
Title (Print)


Signature

J.M. Howe
for
H. Wilson

June 26, 00
Date

For Nunavut Water Board use only

APPLICATION FEE Amount: \$ 30.00 Receipt No.: _____

WATER USE DEPOSIT Amount: \$ _____ Receipt No.: _____

EXECUTIVE SUMMARY

Miramar Hope Bay Ltd. and Cambiex Exploration Inc., collectively the Hope Bay Joint Venture ("HBJV") request an amendment to their North Hope Bay Water permit NWB2HOP0002 to allow the construction and implementation of a new sewage treatment facility at the Windy Camp. The permit currently authorizes water use and disposal of waste associated with diamond drilling and camp domestic water usage in the Windy Lake and Wolverine Lake areas.

Currently all septic wastes at the Windy Camp are deposited into latrine pits. The installation of the ROTODISK Sewage Treatment System will improve the current latrine system by (1) providing natural bio-treatment of wastes, (2) discharge of sewage and greywater to a location which will be sufficiently removed from Windy Lake so that it will not impair the quality of Windy Lake water and (3) will also eliminate the possibility of future coliform contamination of Windy Lake from flooded latrines during freshet.

The ROTODISK plant was previously one of two plants permitted and installed at the Boston Camp in 1997. The estimated effluent volume at Boston was over-estimated and the second unit was never utilized. The HBJV has therefore moved the second ROTODISK plant from the Boston camp to the Windy Lake camp and intends to install it during the summer of 2000. Peak capacity at the Windy camp during the 2001 exploration program is expected to be 50-60 people, significantly less than the peak design capacity for 95 people. Attached to this permit amendment are the original design documents and summary operating information provided by the manufacturer CMS Group Inc.

The HBJV recognizes that the Hope Bay region is environmentally very sensitive. The proposed work is not expected to have any significant negative impacts on the environment. The HBJV is also concerned with the quality of the Windy Lake water, and as such the HBJV will implement a regular water sampling program to ensure the quality of water is not adversely affected.

The HBJV intends to commence construction of these facilities approximately July 15, 2000. However, the facilities will not be fully operational until February 2001.

[illegible]

LEGEND

■ Sleeping Tents

□ Common Areas

KIT Kitchen
D Dry
SHR Showers
OH Outhouses
TV TV Tent
P Pool Tent

■ Work Areas

O Office
L Logging Tent
T Tech Tent
S Splitting Tent
SH Shop

(H) Helipad

Windy Lake

0 20 40
Metres

Hope Bay Joint Venture

Hope Bay Belt Gold Project
Nunavut, Canada

Windy Camp

June 26, 2000

