

## YUKON WATER BOARD

Pursuant to the *Waters Act* and *Waters Regulation*, the Yukon Water Board hereby grants a Type B water licence for a quartz mining undertaking to:

Hudson Bay Mining and Smelting Co. Ltd.  
P.O. Box 1500  
Flin Flon, Manitoba R8A 1N9

**LICENCE NUMBER:** QZ08-080  
**LICENCE TYPE:** B                      **UNDERTAKING:** QUARTZ MINING  
**LOCATION:** Sekie Creek #2  
**MAP CO-ORDINATES:** Latitude: 63° 06' N Longitude: 130° 05' W  
**PURPOSE:** To deposit a waste for a quartz mining undertaking  
**EFFECTIVE DATE:** The effective date of this Licence shall be the date on which the signature of the Chairperson of the Yukon Water Board is affixed.  
**EXPIRY DATE:** December 31, 2012

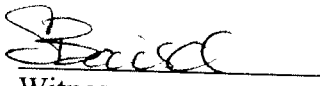
This Licence shall be subject to the restrictions and conditions contained herein and to the restrictions and conditions contained in the *Waters Act* and the *Waters Regulation* made thereunder.

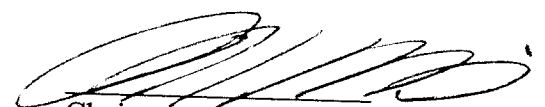
This licence shall be deemed to be an amendment of licence number QZ99-046.

Dated this 19 day of

Approved by:

September, 2008.

  
Witness

  
Chairperson  
YUKON WATER BOARD

## PART A - DEFINITIONS

“Act” means *Waters Act* and any amendments thereto.

“Application” means Water Use Applications QZ99-046, QZ04-068, QZ07-077 and QZ08-080, including any additional submissions and/or revisions submitted to the Yukon Water Board by the Licensee, up to the date of the Board’s decision.

“Board” means the Yukon Water Board.

"Inspector" means any person designated as an Inspector under the Act.

"Natural Boundary" means the visible high water mark of any lake, river, stream or other body of water where the presence and action of water is so common and usual and so long continued as to mark upon the soil of the bed of the lake, river, stream or other body of water a character distinct from that of the banks thereof, both in respect to vegetation and in respect to the nature of the soil itself. In addition, the best estimates of the edge of dormant or old side channels and marsh areas are considered to be Natural Boundaries.

“Regulation” means the *Waters Regulation* made under the Act.

“Waste” means any substance as defined in the Act.

“Watercourse” means any stream, lake, pond, river, creek, spring, ravine or swamp whether ordinarily containing water or not.

“Wetted Perimeter” means the horizontal extent of the present water level while the work is taking place.

## PART B - GENERAL CONDITIONS

### Representations, Warranties and Undertakings

1. In this licence, the Board has relied on the representations, warranties and undertakings provided by the applicant in the material filed in the Application.
2. Where there is a discrepancy between the Application and this licence, the conditions of this licence shall prevail.

### Other Laws

3. No condition of this licence limits the application of any other federal, territorial, first nation or municipal legislation.

Correspondence

4. Where any direction, notice, order or report under this licence is required to be in writing, it shall be given:

- a) To the Licensee, if delivered, faxed or mailed by registered mail to the following address:

Hudson Bay Mining and Smelting Co. Ltd.  
P.O. Box 1500  
Flin Flon, Manitoba R8A 1N9  
Fax: (204) 687-2173

and shall be deemed to have been given to the Licensee on the day it was delivered or faxed, or 7 days after the day it was mailed, as the case may be.

- b) To the Board, if delivered, faxed or mailed by registered mail to the following address:

Yukon Water Board  
Suite 106, 419 Range Road  
Whitehorse, YT Y1A 3V1  
Fax: (867) 456-3890

and shall be deemed to have been given to the Board on the day it was delivered or faxed, or 7 days after the day it was mailed, as the case may be.

- c) The Board or the Licensee may, by notice in writing, change its address for delivery.

Non-Compliance

5. In the event that the Licensee fails to comply with any provision or condition of this licence, the Board may, subject to the Act, cancel the licence.

Other Uses

6. If, subsequent to the issuing of this licence, the Licensee uses water and/or deposits Waste in one or more ways not authorized in this licence, and the combined effect of those uses and/or deposits of Wastes, as determined by an Inspector:

- a) has no potential for significant adverse environmental effects; and  
b) does not interfere with existing rights of other water users or Waste depositors; and  
c) satisfies the criteria set out in column 2 of Schedule 7 of the Regulation,

no amendment to this licence will be required for that use of water and/or deposit of Waste.

Spills and Unauthorized Discharges

7. The Licensee shall immediately contact the 24-hour Yukon Spill Report number, 867 667-7244, and implement the Spill Contingency Plan should a spill or an unauthorized discharge occur. A detailed written report on any such event including, but not limited to, dates, quantities, parameters, causes and other relevant details and explanations, shall be submitted to the Board not later than 10 days after the occurrence.
8. All personnel shall be trained in procedures to be followed and the equipment to be used in the containment of a spill.
9. The spill contingency plan shall be posted on site for the duration of the works.

Hazardous Materials Storage

10. A complete inventory of chemicals, fuels, oils, lubricants and other hazardous materials, and their locations, shall be maintained by the Licensee.

Annual Reports

11. The Licensee shall submit annual reports to the Board. The initial report shall cover the period from January 1 to December 31 of each year and shall be submitted to the Board on or before April 1 of the following year.
12. Annual reports shall include the information required by this licence and by the Regulation, including, but not necessarily limited to:
  - a) all monitoring data required to be collected by this licence; and
  - b) a report on all activities carried out during the preceding year as part of the study of contaminant loadings in Sekie Creek #2 and the South MacMillan River.

Reports

13. Unless otherwise specified in this licence, all reports shall be submitted to the Board in an unbound form that is reproducible by standard photocopier and shall be accompanied by 5 copies.
14. All reports shall be submitted in digital form on computer diskette using an IBM compatible format that is readable using commonly available software.

Term of Licence

15. The term of this licence is for the period from the effective date to December 31, 2012.

**PART C - OPERATING CONDITIONS**

Waste Deposit

16. The Licensee is hereby authorized to deposit Waste in the form of discharge water from the existing mine adit to Sekie Creek #2, as described in the Application, and subject to the conditions of this licence.

**PART D – EFFLUENT QUALITY STANDARDS**

17. After March 12, 2009, a grab sample of any Waste discharged at Station W5, and any other point of entry of a Waste discharge into receiving waters, shall meet the following effluent quality standards:

Parameter	Concentration
Arsenic (dissolved)	1.0 mg/L
Copper (total)	0.6 mg/L
Lead (total)	0.4 mg/L
Nickel (total)	1.0 mg/L
Zinc (total)	1.0 mg/L

**PART E – MONITORING**

18. The Licensee shall conduct monitoring activities at the following locations:

Station	Location	Description	Easting (UTM Zone 9 NAD83)	Northing (UTM Zone 9 NAD83)
W2	Tom Creek	First upstream tributary from the mine adit, approximately 200 m from the confluence with Sekie Creek #2.	441,463	7,003,964
W3	Sekie Creek #2 upstream of site.	Approximately 500 m upstream of the mine adit of the exploration camp and small waterfall on Sekie Creek #2.	441,765	7,003,914
W3B	Sekie Creek #2 upstream of W3 and mining disturbances.	Approximately 300 m to 500 m upstream of W3 and the mining-related disturbances on Sekie Creek #2.	441,949	7,003,773

Station	Location	Description	Easting (UTM Zone 9 NAD83)	Northing (UTM Zone 9 NAD83)
W5	Adit discharge.	Less than 10 m from the adit portal.	441,645	7,004,218
W6	Sekie Creek #2 downstream of adit.	Approximately 200 m downstream of the confluence of the adit discharge and Sekie Creek #2 and down gradient of the rock dump.	441,541	7,004,314
W8	Sekie Creek #2 crossing.	North Canol Road crossing of Sekie Creek #2.	439,443	7,005,615
W11	MacMillan River upstream of Sekie Creek #2.	Meander in river adjacent to airstrip approximately 800 m upstream of the mouth of Sekie Creek #2.	439,279	7,006,052
W12	MacMillan River downstream of Sekie Creek #2.	Staight section of river adjacent to North Canol Road approximately 950 m downstream of the mouth of Sekie Creek #2 and 1.3 km upstream from Macintosh Creek.	439,100	7,005,164
W13	MacMillan River #2 Crossing.	15 km downstream from the mouth of Sekie Creek #2.	439,210	6,996,140

19. The following data shall be obtained at each monitoring station:

Field Measurements

- i) conductivity
- ii) pH
- iii) water temperature
- iv) rate of flow
- v) field notes
- vi) photographs

Laboratory Analysis

- i) Physical tests: pH conductivity; water temperature; Total Suspended Solids; and hardness.
- ii) Dissolved anions: alkalinity; acidity; and total sulphate.
- iii) Total and dissolved ICP metals: Including, but not necessarily limited to, Aluminum; Antimony; Arsenic; Barium; Cadmium; Calcium; Chromium; Copper; Iron; Lead; Nickel; Selenium; Silver; Thallium; and Zinc.

20. Frequency of Sampling:

Sampling shall be carried out at each monitoring station in May and September of each year.

21. All data collection and analysis shall be conducted in accordance with the current edition of Standard Methods for Examination of Water and Waste Water, prepared and published jointly by the American Water Works Association and the Water Pollution Control Federation.

**PART F – PLAN**

22. Within 60 days of the effective date of this licence, the Licensee shall submit to the Board a detailed plan for the remediation activities of the mine adit and drainage. The plan shall include at a minimum, but not necessarily be limited to:
- a) preliminary design drawings sealed by a Professional Engineer, licensed to practice in Yukon. The design drawings of the adit plug and all associated structures to be constructed must be in plan and profile, with an indication of the scale; and
  - b) a proposal for the effluent standards for any discharge from the site to any receiving waters, upon completion of the remediation activities.
23. The Licensee shall not implement the plan required by this section of the licence until the Chairperson notifies the Licensee to do so, in writing.
-