

**YUKON WATER BOARD
AMENDMENT OF LICENCE**

LICENSEE: MINTO EXPLORATIONS LTD.

LICENCE NUMBER: QZ96-006

AMENDMENT NUMBER: Two (2)

Application Number: QZ04-064

Pursuant to the *Waters Act*, Water Use Licence QZ96-006, as previously amended by amendment one, is hereby further amended, as attached:

Issued:


Dated this 14 day of

YUKON WATER BOARD

Sept, 2005



Witness



Vice Chairperson

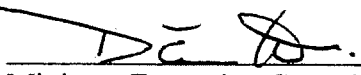
Approved:

This 20th day of

September, 2005



Witness



Minister, Executive Council Office

1. All references to Yukon Territory Water Board are replaced by Yukon Water Board.

2. All references to Regulations are replaced by Regulation.

3. The following subclauses are hereby added to Clause 1:

- h) "Interim Closure" means the period from the effective date of Amendment Two (2) of this licence until 6 calendar months prior to the Start Up Date.
- i) "Interim Closure Plan" means the "Minto Explorations Ltd., Minto Project Yukon Care and Maintenance & Interim Closure Plan, November 2003" which was submitted to the Yukon Water Board on November 28, 2003 and included in water use register QZ04-064 as exhibit 1.2, and it includes any revisions that may be provided in accordance with the requirements of Part H of this licence.

4. Clause 8 is hereby withdrawn and replaced by:

Correspondence

8. 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:

Minto Explorations Ltd.
Suite 860 - 625 Howe Street
Vancouver, B.C. V6C 2T6
Fax: 604 689 5041

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, Yukon 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

5. Clauses 11 and 12 are hereby withdrawn and replaced by:

11. The Licensee shall submit annual reports to the Board. The reports shall be for the period May 1 to April 30 of each year, and shall be submitted no later than July 30 of each year.
12. Annual Reports shall include the information required by this licence and shall include, but not necessarily be limited to:
 - a) summaries of all data generated as a result of the monitoring requirements of this licence, including analysis and interpretation by a qualified individual or firm and a discussion of any variances from base line conditions or from previous years' data, and
 - b) a detailed record of any major maintenance work carried out on any physical works where that maintenance may have an impact on water quality, and
 - c) updated descriptions and UTM coordinates for the surveillance monitoring sites listed in Appendix 1 of this licence, and
 - d) any other reports which are required by this licence or by Regulation.

6. Clause 14 is hereby withdrawn and replaced by:

Term of Licence

14. The expiry date of this licence shall be June 30, 2016.

7. Clause 58 is hereby withdrawn and replaced by:

Water Quality Surveillance Program

58. a) The Licensee shall comply with the Water Quality Surveillance Program that is specified in Appendix 3 to this licence, except during Interim Closure. During Interim Closure, the Licensee shall comply with the program identified in Part H of this licence.
- b) Monitoring and sampling shall be carried out in accordance with the procedures and standards described in:
 - i) Guidance Document for the Sampling and Analysis of Metal Mining Effluents, April 2001, (Report: EPS 2/MM/5), Minerals and Metals Division, Environment Canada.

- ii) Guidance Document for Flow Measurement of Metal Mining Effluents, April 2001, (Report: EPS 2/MM/4), Minerals and Metals Division, Environment Canada.
- iii) Standard Guide for Sampling Ground-Water Monitoring Wells, ASTM D4448-01, ASTM International, PA, USA.

8. Clause 78 is hereby withdrawn and replaced by:

78. a) The Licensee shall submit a Comprehensive Decommissioning and Reclamation Plan to the Board no later than the second anniversary of the Start Up Date.
- b) In the event that permanent closure occurs prior to the submission of the Comprehensive Decommissioning and Reclamation Plan, then, in addition to any other requirements of this licence, the Licensee shall implement the reclamation components of the current version of the Interim Closure Plan.

9. The following new clauses are hereby added:

PART H - INTERIM CLOSURE

Interim Closure Plan

84. During Interim Closure, and except as otherwise required by this part of this licence, the Licensee shall implement and comply with the Interim Closure Plan.
85. The Licensee shall review and update the Interim Closure Plan annually until the submission of the Comprehensive Decommissioning and Reclamation Plan and shall submit a report on the review, including any revisions to the Interim Closure Plan, as a component of each annual report.
86. The Licensee shall notify the Board at least six calendar months prior to the Start Up Date. The Licensee may not mill tailings or ore through the mill, for a period that exceeds two successive days, unless six calendar months notice has first been provided to the Board.

Semi Annual Physical Inspections

87. a) During Interim Closure, the Licensee shall inspect the site twice annually, and shall submit, as part of each annual report, an inspection report that contains a description of repairs and/or upgrading undertaken during the previous year, an explanation of any repairs/upgrading identified as required but not completed, and an identification of additional work to be undertaken in the next year.

- b) The facilities that must be inspected during the semi annual inspections carried out during Interim Closure include, but are not necessarily limited to:
 - i) the barge landing at the Yukon River;
 - ii) the access road;
 - iii) all surface drainages, including ditches and culverts;
 - iv) precautionary signage; and
 - v) mill and camp sites, including buildings, equipment and infrastructure.

Water Quality and Flow Monitoring

88. During Interim Closure, the Licensee shall comply with the following surveillance program at sites W2, W3, P93-E and P94-20, as identified in Appendix 1 of this licence, annually in May/June for the following parameters:
- a) Field pH, field temperature and field conductivity;
 - b) Total Metals (at stations W2 and W3 only) by multi-element ICP scan (low method detection limits), and Hardness;
 - c) Dissolved Metals by multi-element ICP scan (low method detection limits);
 - d) Total Suspended Solids (at stations W2 and W3 only), Total Dissolved Solids, Total Alkalinity, Total Sulphate, Total Ammonia, Nitrogen-Nitrate, Nitrogen-Nitrite, Dissolved Organic Carbon (at station W2 only), and Total Organic Carbon (at station W2 only);
 - e) Flow (at stations W2 and W3 only); and
 - f) Static Water Level (at stations P93-E and P94-20 only).

Sediment Monitoring

89. During Interim Closure, the Licensee shall comply with the following sediment monitoring program every two years in July /August at stations W2 and W3, as identified in Appendix 1 of this licence:
- a) Three replicate samples of fine sediment shall be taken from within the active channel of the stream, using an aluminum or Teflon scoop.
 - b) Samples shall be dried and screened, using sieve sizes at ASTM mesh numbers 10, 20, 40, 60, 100, 140 and 270 (ASTM E11-61) and the fraction weights recorded.

- c) A sub-sample, composed of material that passes through a 230 mesh sieve (<63 µm), shall be analyzed for metals by a 33 element (minimum) ICP scan. Loss on ignition shall also be determined by heating the sample to 600°C.
- d) Water quality samples shall be taken and tested at the same time as the sediment sample and shall be tested for the same parameters specified in Clause 88 of this licence.

11. Appendix 1 is hereby withdrawn and replaced by:

Appendix 1 - Surveillance Monitoring Sites

#	Description
W1	Lower Reach of Minto Creek
W2	Minto Creek, at the mouth
W3	Minto Creek, 50 metres downstream of the toe of the Main Tailings/Water Dam
W4	Yukon River, upstream of the confluence with Minto Creek
W5	Yukon River, downstream of the confluence with Minto Creek
W6	Mouth of the tributary on the North side of Minto Creek, approximately 1.1 km downstream of W3
W7	Mouth of the tributary on the South side of Minto Creek, approximately 0.8 km downstream of W3
W8	Mouth of tributary 5
W9	Upper reach of Minto Creek
W10	Minto Creek, just upstream of Waste Dumps
W11	Waste Rock Dump Seepage
W12	Discharge from open pit
W13	Mill Water Storage Pond Discharge (or Mill Water Pond if not discharging)
W14	Tailings Thickener Overflow
W15	Minto Creek, downstream of the overburden dump, just upstream of Open Pit
W16	Main Tailings/Water Storage Pond Discharge (or Main/Tailings Water Storage Pond if not discharging).

#	Description
W17	Main Tailings/Water Storage Pond Dam Seepage
W18	Oxide Stockpile Seepage
W19	Low Grade Sulphide Stockpile Seepage
W20	Spill Pond Discharge
W21	Piezometer on Tailings Dam
P93-E	Groundwater monitoring well located near W9
P94-20	Groundwater monitoring well located near W3

YUKON WATER BOARD
REASONS FOR DECISION
WATER USE APPLICATION QZ04-064
MINTO EXPLORATIONS LTD.

The Yukon Water Board has concluded deliberations pertaining to application QZ04-064 and has agreed to issue amendment #2 to water use licence QZ96-006.

In application QZ04-064, Minto Explorations Ltd. requested three amendments to water use licence QZ96-006, which is a type A licence for quartz mining undertaking. In summary, Minto proposed

- a) various administrative amendments,
- b) extension of the expiry date from June 2006 to June 2016, and
- c) incorporation of a Care and Maintenance and Interim Closure Plan into the licence, including revising the monitoring requirements to reflect that the project has not been fully implemented.

Notice of public hearing was provided in accordance with the requirements of the *Waters Act*. In response, the board received interventions from

Selkirk First Nation
Environment Canada, and
Government of Yukon (Environment).

None of the parties indicated that they intended to attend and participate in the public hearing. The board determined that the public hearing should be cancelled.

Minto provided a written response to the interventions.

An environmental assessment screening report was prepared by Government of Yukon, Development Assessment Branch. The determination of the screening report was that the project is not likely to cause significant adverse effects.

Background

Water Use Licence QZ96-006 was issued to Minto Explorations Ltd. (Minto) in 1998. The mine has not been brought into production to date, but some site development has taken place.

The original licence required Minto to submit a comprehensive decommissioning plan either 2 years after start up, or by the 3rd anniversary of the licence, whichever came sooner.

In 2002, recognizing that start up had not happened and was not imminent, but that "information needed to compile a meaningful comprehensive decommissioning plan will not be available until after the facilities are built", the board issued amendment #1, which changed the date for

submission of the comprehensive plan until the second anniversary of start up.

At the same time, the board recognized that some work had taken place on the site, and that there needed to be a plan in place to decommission that work if start up never occurred. To address this, amendment #1 also required Minto to submit an interim plan for reclaiming the works already undertaken at the site, and to update that interim plan if additional work was undertaken.

In November, 2003, Minto submitted a "Care and Maintenance and Interim Closure Plan". The plan addresses how the disturbances to date will be reclaimed, and proposes a modified monitoring plan for the current level of activity.

Administrative Changes and Expiry Date

All parties supported the proposed administrative amendments, as well as the change to the expiry date of the licence, and the board has incorporated those changes into amendment #2.

Interim Closure/Care and Maintenance

All parties supported the inclusion of the November 2003 Care and Maintenance and Interim Closure Plan into the licence; however, there were various recommendations about how this should be accomplished and when the interim monitoring program should change to the full monitoring specified in the licence. Furthermore, although the Start Up Date for the mine is defined in the licence, there was no definition of interim closure that could be used to establish when the Care and Maintenance and Interim Closure Plan would apply.

The board considered these issues and has decided:

- a) that full monitoring should begin 6 months prior to the Start Up Date.
- b) to define Interim Closure as being the period from the effective date of Amendment Two of the licence until 6 calendar months prior to the Start Up Date. In doing so, the Board's intent is that, together with the new clauses added in Part H, the Interim Closure Plan and its monitoring schedule will apply only until 6 months prior to the Start Up Date, at which time the full monitoring schedule contained in the licence will begin to apply. Minto is required to give 6 months notice of the Start Up Date to the board and may not mill for more than two consecutive days without the 6 months advance notice to the board.
- b) to require that the Interim Closure Plan be implemented during Interim Closure, except as otherwise provided for in the licence.

- c) to require that monitoring be carried out during Interim Closure in accordance with the program generally described in the Interim Closure Plan but, with one exception, as further recommended in the intervention of Environment Canada. The exception is that Environment Canada recommended that water quality monitoring be carried out during freshet in April/May. Minto advised that due to ice breakup, that time could be unsafe and instead recommended May/June. The board concurred with Minto's concern and has specified May/June.

Monitoring Network

The board has amended the list of monitoring surveillance sites in Appendix 1 to add the two groundwater monitoring locations (P93-E and P94-20) identified in the Interim Closure Plan. In addition, Clause 12, which deals with the annual reports, has been amended to require Minto to annually update the list of surveillance sites with coordinates and descriptions. The board's intent is that a clear, detailed list be established and that it be kept current as the sites are created during the development.

Monitoring Procedures and Standards

Environment Canada recommended that three guidance documents dealing with monitoring procedures and standards be specified in the licence as applying to the project. Minto did not disagree with the recommendation. The board has included the list in Clause 58 b) but notes that it is specific to this application and should not be construed as necessarily applying to any future licence decisions.

Comprehensive Decommissioning and Reclamation Plan

With the Interim Closure Plan having been submitted in November 2003, the board has amended Clause 78 to remove the requirements relating to that submission, but has added a requirement that should permanent closure occur prior to the submission of the Comprehensive Decommissioning and Reclamation Plan, the Licensee shall implement the reclamation components of the current version of the Interim Closure Plan in addition to any other requirements of the licence. In this regard, Clause 85 requires that the Licensee review and update the Interim Closure Plan annually until the submission of the Comprehensive Decommissioning and Reclamation Plan.

Metal Mining Effluent Regulations

Government of Yukon asked the board to expand the scope of the hearing to consider amendments that would address any inconsistencies between the water use licence and the Metal Mining Effluent Regulations (SOR/2002-222) (MMER), pursuant to the *Fisheries Act*.

In response, Minto argued that, as a law of general application, MMER would apply regardless of the conditions of the water use licence, but that MMER do not apply to the Minto project yet because the mine has not been brought into production.

Environment Canada confirmed that Minto will be subject to the Metal Mining Effluent Regulations, but not until construction of the open pit.

The board decided that the scope of the hearing would not be expanded to include modifications related to MMER.

Government of Yukon raised the matter again in their intervention, and recommended that the board revise the effluent standards of the licence to include standards for arsenic and radium, and Minto argued that this recommendation exceeded the scope of the hearing. The board concurred with Minto's position. However, for clarification, the board is of the opinion that clauses 5 and 7 clearly require Minto to comply with Federal laws and Regulations, including MMER.

Bruce Chambers
Bruce Chambers, Vice Chairperson

Sept 14/05