

OFFICE COMPILATION OF TERMS AND CONDITIONS OF
WATER USE LICENCE QZ96-006, Minto Explorations Ltd.
Including amendments 1 & 2 - as of November, 2005

Licence QZ96-006:

Yukon Territory Water Board, Ron Johnson, Chairperson, 27 January 1998
Jane Stewart, Minister of Indian and Northern Affairs Canada, April 27, 1998

Amendment #1 (Application QZ01-053):

Yukon Territory Water Board, Gregg Jilson, Chairperson, 12 August 2005
Robert Nault, Minister of Indian Affairs and Northern Development, August 6, 2002

Amendment #2 (Application QZ04-064):

Yukon Water Board, Bruce Chambers, Vice Chairperson, Sept 14, 2005
Minister of Executive Council Office, Dennis Fentie, Sept 20, 2005

*All references to Yukon Territory Water Board replaced by Yukon Water Board
All references to Regulations replaced by Regulation*

PART A - GENERAL CONDITIONS

Definitions:

1.
 - (a) "Act" means Yukon Waters Act and any amendments thereto.
 - (b) "Regulations" means the Regulations made under the Act.
 - (c) "Board" means the Yukon Territory Water Board.
 - (d) "Inspector" means any person designated as an Inspector under the Act.
 - (e) "Start Up Date" means thirty (30) days following the date that the Licensee begins milling tailings or ore through the mill, providing that the milling activity continues for a period of two successive days. If milling takes place for less than two successive days, then that date shall not be considered for the purposes of determining the start up date.
 - (f) "Natural Boundary" means the visible high water mark of any body of water where the presence and action of water is so common and usual and so long continued as to mark upon the soils of the bed of the 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 dormant or old side channels and wetlands are considered to be natural boundaries.
 - (g) "Application" and "Water Use Application" mean water use application QZ96-006, including any additional submissions and/or revisions, submitted to the Board by the Licensee.
 - (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.*

Representations, Warranties and Undertakings

2. The Board has relied on the representations, warranties and undertakings provided by the applicant in the material filed as application QZ96-006. Such representations, warranties and undertakings, where referenced in this licence, are considered by the Board to be a part of the licence, but shall be subject to the terms and conditions of this licence.

Fees

3. On or before the anniversary of the effective date of this licence, the Licensee shall pay the annual water use fees that are prescribed by the Regulations.

Deleterious Substances

4. Subject to the provisions of this licence, deleterious substances shall be used, transported, stored and disposed of in such a manner that they are not deposited in, or allowed to be deposited in, any waters.

Other Laws

5. No term of this licence limits the application of any other Federal or Territorial Law

Non-Compliance

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

Waste Discharge Standards

7. This licence is issued to the Licensee, subject to the conditions contained herein, with respect to the use or return of water, or the depositing or permitting the deposit of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposit of such waste may enter any waters. However, it is also a condition of granting of this licence to the Licensee that, whenever future Regulations are made by the Governor in Council under the Yukon Waters Act, or any other statute imposing conditions relating to the quantity and types of waste that may be deposited that are more stringent than any conditions included in this licence, this licence shall be deemed, upon prescription of such Regulations, to be automatically amended to conform with such Regulations.

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

Reports

8. Unless otherwise specified in this licence, all reports, studies and designs shall be submitted in an unbound form which is reproducible by standard photocopier and shall be accompanied by five (5) paper copies and by one copy on computer diskette.

9. Water quality monitoring reports shall be submitted in printed form and on computer diskette, in an IBM compatible spreadsheet format.

Annual Reports

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.

13. Spills and Unauthorized Discharges

- a) The Licensee shall apply the relevant procedures in the Spill Contingency Plan that has been filed with the Board as Exhibit 1.4 to the water use application. The Licensee shall review the spill contingency plan annually and shall provide a summary of that review, including any revisions to the plan, as a component of the annual report.
- b) The Licensee shall comply with all existing federal and territorial requirements with respect to spill reporting, clean up and liability.
- c) The Licensee shall immediately contact the 24-hour Yukon Spill Report telephone number (867) 667-7244, should a spill or an unauthorized discharge occur, or appear likely to 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 fifteen (15) days after its occurrence.

Term of Licence

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

PART B - SECURITY

15. The Licensee shall provide security in the total amount of \$4,450,000 (four million, four hundred and fifty thousand dollars).
16. The schedule for payment of security shall be as follows:
- a) \$50,000 within thirty days of the effective date of this licence, and
 - b) \$750,000 (seven hundred and fifty thousand dollars) on or before the start up date, and
 - c) \$2, 550,000. (two million, five hundred and fifty thousand dollars) to be paid in

twenty four quarterly installments of \$106, 250 (one hundred and six thousand, two hundred and fifty dollars). The first payment shall be made within three months of the start up date and subsequent payments shall be made every three months thereafter.

- d) \$800,000. (eight hundred thousand dollars) payable on the first anniversary of the start up date, and
 - e) \$300,000. (three hundred thousand dollars) payable on the fifth anniversary of the start up date.
17. The form of the security required by this Licence shall be in accordance with the provisions of section 12(3) of the Regulations.

PART C - DESIGN, CONSTRUCTION AND MODIFICATION

18. The Licensee shall maintain in good repair all works associated with the undertaking.
19. This Licence authorizes the construction of only those structures that have been proposed in the water use application.
20. At least ninety days prior to commencement of construction, the Licensee shall submit to the Board final designs, construction plans and specifications for all structures that have been proposed in the water use application, and for any modifications to those structures.
21. At least ten days prior to commencement of construction, the Licensee shall provide the Board with written notification, including a detailed construction schedule and the name of the field supervisor.
22. The Licensee shall provide as-constructed plans and drawings of all structures within sixty (60) days of completion. The as-constructed plans shall be submitted as transparencies which are reproducible by standard photocopier and shall be accompanied by five (5) copies.
23. Construction of all facilities shall be accomplished using sound engineering practices, supervised by a technically qualified person and inspected by a qualified engineer who is registered to practice in Yukon.
24. Waste Rock or overburden with a paste pH less than 5.0, an NP:AP ration less than 3:1, or a sulphide sulphur content greater than 0.3% shall not be used for construction purposes.
25. Determination of materials that are suitable for construction purposes shall be based upon Acid-Base Accounting carried out on
- a) composite samples of drill cuttings from each blast, and
 - b) representative samples of overburden material that is collected

- i) whenever overburden is being mined, and
- ii) whenever there is a change in material type.

26. The results of the Acid-Base Accounting program that was used to determine construction materials shall be submitted to the Board as a component of the annual report.

Main Tailings/Water Dam and Minto Creek Diversion Ditch

27. a) The Tailings/Water Dam and the Minto Creek Diversion Ditch shall be constructed in accordance with the construction specifications that are detailed in the construction specifications report that was submitted to the Board as exhibit 1.6.1 of the water use application and in accordance with the relevant components of the design drawings that were submitted to the Board as exhibit 1.6.2 of the water use application.
- b) For clarity: Exhibit 1.6.1 of the water use application is a document entitled "Construction Specifications, Tailings/Water Dam, Minto Project, Yukon, 0201-95-11509" dated April, 1997, that was prepared by EBA Engineering Consultants Ltd., Whitehorse, Yukon.
- c) For clarity: Exhibit 1.6.2 of the water use application is a set of design drawings, entitled "Design Drawings - Tailings/Water Dam - Diversion Ditch" dated April, 1997, that were prepared by EBA Engineering Consultants Ltd., Whitehorse, Yukon.
28. In addition to any other monitoring requirements of this licence, the Licensee shall monitor, sample, and report on the construction and performance of the Tailings/Water Dam and the Minto Creek Diversion Ditches, in accordance with the procedures that are detailed in the Construction Quality Assurance Manual that is appended as appendix 7 to this licence.
29. All materials that are used in the construction of the Dam shall be certified as conforming to the specifications that are set out in exhibit 1.6.1 of the water use application and this certification must be provided by a qualified engineer registered to practice in Yukon.

Mill Water Pond

30. The Licensee shall construct a Mill Water Pond only in accordance with the designs that were submitted to the Board as exhibit 1.6.4 and 1.7 of the water use application.
31. For clarity, Exhibit 1.6.4 of the water use application is a letter, with attachments, from EBA Engineering Consultants Ltd. to Minto Explorations Ltd., dated May 23, 1997 that references "Mill Water Pond, Minto Property, Yukon" in the subject line. Exhibit 1.7 is a letter, with attachments from EBA Engineering Consultants Ltd. to Minto Explorations Ltd., dated June 13, 1997 and includes a set of five drawings detailing the final design of the mill water pond, including the inlet and outlet ditches and the culverts. The drawings are identified as follows:
- Millwater Pond Site Plan, DWG11509-MWP1, 97-06-11;

- Proposed Mill Water Pond Sections, DWG11509-MWP2, 97-06-12;
 - Site Plan and Details of Culvert and Ditch from Millwater Pond to Diversion Ditch, DWG11509-MWP3, 97-06-11;
 - Millwater Pond Liner Details Anchor Trench and Culvert Connection DWG11509-MWP4, 97-06-11, and
 - Minewater, Road Drainage Swales and Millwater Pond Tie-In Details, DWG11509-MWP5, 97-06-11
32. In addition to any other monitoring requirements of this licence, the Licensee shall monitor, sample, and report on the construction and performance of the Mill Water Pond in accordance with the procedures that are detailed in the Construction Quality Assurance Manual that is appended as appendix 7 to this licence.

Foundations - Overburden/Waste Dumps and Ore Stockpiles

33. All waste rock and overburden dumps and ore stockpiles shall be located on stable and thaw-stable foundations. For the purposes of this licence, all soils exhibiting a frozen bulk density of less than 1.7 metric tonnes /m³ shall not be considered to be thaw-stable.

Overburden Dump

34. At least sixty (60) days prior to placement of materials on the overburden dump, the Licensee shall submit an Overburden Dump Design report to the Board.
35. The Overburden Dump Design Report shall include, but not be limited to:
- a) Details and results of the foundation investigation program, carried out in accordance with the “Construction Quality Assurance Manual”, that is appended as appendix 7 to this licence.
 - b) Confirmation that the foundations are located on stable and thaw stable foundations.
 - c) Details pertaining to the layout, configuration and staging of the proposed dump,
 - d) Details of construction methods including lift heights, set backs and overall slopes, and,
 - e) A stability analysis.
36. The Overburden Dump Design Report shall be certified by a qualified engineer who is registered to practice in Yukon.
37. The Licensee shall construct and use the overburden dump in accordance with the Overburden

Dump Design Report except that, should the Board notify the Licensee that a public hearing will be held to review the design, and if that notice includes a direction that the Licensee is not to proceed with construction of the overburden dump or with placement of materials on the overburden dump, then the Licensee shall not proceed with construction of the overburden dump and shall not place materials on the overburden dump, until such time as a public hearing has been convened and the Board has concluded its deliberations.

Main Waste Rock Dump

38. At least sixty (60) days prior to placement of materials on the main waste rock dump or on the oxide ore stockpile, the Licensee shall submit a Main Waste Rock Dump Design report to the Board.
39. The Main Waste Rock Dump Design Report shall include, but not be limited to:
 - a) Details and results of the foundation investigation program, carried out in accordance with the "Construction Quality Assurance Manual", that is appended as Appendix 7 to this licence.
 - b) Confirmation that the foundations are located on stable and thaw stable foundations.
 - c) Confirmation of the location of the dump toes.
 - d) Confirmation that the factors of safety for both short and long term conditions conform with the guidelines provided in the "Investigation and Design of Mine Dumps, Interim Guidelines, prepared for the BC Mine Dump Committee, dated May 1991.
 - e) Details pertaining to the placement of overburden material in the main waste rock dump.
 - f) Details pertaining to the layout, configuration and staging of the proposed dump.
 - g) Details of the construction methods, including lift heights, set backs and overall slopes.
40. The Main Waste Rock Dump Design Report shall be certified by a qualified engineer who is registered to practice in Yukon.
41. The Licensee shall place materials in the waste rock dump in accordance with the Main Waste Rock Dump Design Report except that, should the Board notify the Licensee that a public hearing will be held to review the Main Waste Rock Dump Design Report, and if that notice includes a direction that the Licensee is not to proceed with placement of materials in the main waste rock dump, then the Licensee shall not place materials in the main waste rock dump, until such time as a public hearing has been convened and the Board has concluded its deliberations.

PART D - OPERATING CONDITIONS

Water Use and Waste Deposit

42. The Licensee is hereby authorized
- a) to obtain water from Minto Creek and from groundwater, at a rate not to exceed 182.6m³ per day ;
 - b) to use this water for a quartz mining undertaking, road watering and exploration drilling within the boundaries of the mineral claims that are identified in the water use application, and camp use;
 - c) to construct and operate a mill facility for the processing of oxide ore that will be mined only from sources that are identified in the water use application;
 - d) to construct a Main Tailings/Water Storage Pond, a Spill Pond and a Mill Water Pond and to store water within those facilities;
 - e) to divert Minto Creek through the open pit, then into a Mill Water Pond and then to a main water storage pond and then, by spillway on the main water storage pond dam, back to the environment;

as proposed in water use application QZ96-006 and subject to this Licence. Where there is a discrepancy between water use application QZ96-006 and the terms and conditions of this Licence, then the terms and conditions of this Licence shall prevail.

Water Treatment Contingency Plans

43. Prior to the commencement of pit development, the Licensee shall provide the Board with detailed written assurance that all necessary resources and equipment are on site to comply with contingency treatment plans that are outlined in the water use application.
44. If dissolved metal concentration at the discharge from the mill water pond exceeds the effluent quality standards of this licence, then the Licensee shall operate a water treatment facility at the Mill Water Pond discharge.
45. Within thirty (30) days of beginning operation of a water treatment facility at the Mill Water Pond, the Licensee shall submit to the Board a detailed design, including construction triggers and construction schedules, for water treatment system at the Main Water Storage Pond.

Reagent Use

46. The Licensee shall notify the Board, in writing, of any plans to use any reagents other than

those that are specified in the water use application. The notice shall be provided at least ten (10) days prior to the use of those reagents.

Thickened Tailings Disposal

47. Except as otherwise explicitly permitted by this licence, all tailings deposited in the thickened tailings disposal area shall have a density of not less than 67.5% solids by weight.
48. Subject to the following conditions, the licensee may conduct one project to demonstrate the effectiveness of a lower specified density and tailings that are deposited in the thickened tailings disposal area during the project may have a thickened density of less than 67.5% solids by weight.
 - a) The demonstration project shall occur only once during this licence.
 - b) The duration of the demonstration project shall not exceed ninety days.
 - c) No tailings with a density of less than 67.5% solids by weight shall be deposited into the thickened tailings area until at least thirty days after the Licensee has provided the Board with written notice of intent to begin the demonstration project.
49. Equipment that is adequate to provide lime addition to the thickened tailings must be on site and operational prior to the start of production. Prior to the commencement of deposition of any thickened tailings to the disposal area, the Licensee shall provide the Board with detailed written assurance that this equipment is on site and is in good working order.

Spill Pond Solids Disposal

50. The Licensee may dispose of tailings solids from the Spill Pond in one of the following locations:
 - a) The Main Waste Rock Dump overburden dump, in accordance with specific criteria defined in the Main Waste Dump Design Report, or
 - b) In the tailings impoundment, providing that the density is equal to or exceeds the thickened tailings density requirements of this licence;

Sulphide Ore Stockpiles

51. The Licensee may stockpile low grade sulphide ore on the mill pad, or on another similarly prepared pad, in order to allow for monitoring, collection and treatment of runoff.

Forestry Operations

52. If the Licensee harvests fuel wood, and providing that any and all other regulatory

requirements are met, then the following restrictions shall apply to all areas within the boundaries of the mineral claims that were identified in the water use application, except for those areas identified as the mine pit, storage ponds, waste dumps, mill structures and tailings impoundment facilities:

- a) The bed of any water course shall not be used as an access route.
- b) The Licensee shall retain a leave strip of at least twenty metres in width adjacent to any water course and shall not conduct any fuel wood harvesting within that leave strip. The leave strip shall be measured horizontally and at right angles from the natural boundary of the watercourse.
- c) The Licensee shall not skid logs across any watercourse.
- d) Mechanized logging may only take place when the ground surface is in a state that is capable of fully supporting the related equipment and vehicles without rutting or gouging.

Main Waste Rock Dump

53. Ice rich or organic materials shall not be placed in the main waste rock dump. For purposes of this licence, all materials with a frozen bulk density of less than 1.7 metric tonnes/ m³ shall be considered to be ice rich and shall be segregated for placement in the separate overburden dump.

PART E - EFFLUENT QUALITY STANDARDS

54. All effluent that is discharged from the project, both during operation and at final decommissioning, shall meet the following effluent quality standards at all points of compliance:

<u>Parameter</u>	<u>Concentration</u>
pH	6.5 to 9.0 pH units
Suspended solids	15 mg/l
Aluminum (total)	0.5
Iron (total)	1.0 mg/l
Copper (total)	0.01 mg/l
Lead (total)	0.002 mg/l
Manganese (total)	0.2 mg/l
Nickel (total)	0.065 mg/l
Zinc (total)	0.03 mg/l
total Ammonia	1.0 mg/l
Oil and grease	no visible oil or grease
Toxicity (LT ₅₀)	100% (pH non-adjusted) *

55. All effluent that is discharged from the project must meet the non toxicity requirement defined by the LT_{50} rainbow trout static bioassay, 96 hours at 100%, pH non-adjusted.
56. The points of compliance for effluent discharge standards that are required by this licence, during construction, operation, temporary and permanent closure, shall be as follows:
- a) When there is a surface flow from the Main Tailings/Water Dam, then the point of compliance shall be at the point of discharge from the Main Tailings/Water Dam.
 - b) When there is no surface flow from the Main Tailings/Water Dam, then the point of compliance shall be at site W3, as described in Appendix 1 “Surveillance Monitoring Sites”.
 - c) When there are any seepage flows into Minto Creek, then the points of compliance shall also be at any point where those seepage flows enter Minto Creek.
 - d) Prior to and during construction of the Main Tailings/Water Dam, the point of compliance shall be at site W3, as described in Appendix 1 “Surveillance Monitoring Sites”.

PART F - PROGRAMS AND STUDIES

57. The Licensee shall comply with the programs and studies required by this Licence and, unless otherwise specified, shall submit the data that is compiled as a result of these programs and studies as a component of the annual reports.

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.

59. The Licensee shall provide the Board with monthly reports regarding the water quality

surveillance program, including all data from metal ICP scans, and each report shall be submitted to the Board no more than thirty days after the completion of the month being reported.

Physical Monitoring Program

60. The Licensee shall comply with the requirements of the Physical Monitoring Program that is appended as appendix 2 to this licence.
61. The Licensee shall complete an annual physical inspection of the facilities, in accordance with the following conditions:
 - a) The inspection will encompass the Main Tailings/Water Dam, the Mill Water Pond, the Waste Rock and Overburden Dumps and the Diversion Ditch.
 - b) The inspection shall be completed by a qualified engineer who is registered to practice in Yukon.
 - c) The engineer that completes the inspection shall prepare a report that includes the results of the inspection and any recommendations for remedial actions. The report shall be submitted to the Board within forty five days of the inspection. The annual report for each year shall include a list of each of the recommendations and an explanation of how each recommendation has been addressed.
62. The reduced monitoring frequencies of the Physical Monitoring Program that are indicated in Appendix 2 as "After Year 1" are subject to the prerequisite that, for each year, the report of the annual physical inspection must include a recommendation that such reduced monitoring is acceptable for the Main Tailings/Water Dam and for the Mill Water Pond. If the annual physical inspection report does not include this recommendation for either facility, then physical monitoring of that facility must comply with the monitoring requirements that are identified as "Year 1".

Sediment Monitoring Program

63. The Licensee shall comply with the sediment monitoring program that is appended as appendix 4 to this licence.

Benthic Monitoring Program

64. The Licensee shall comply with the benthic monitoring program that is appended as appendix 5 to this licence.

Acid Based Accounting Test Program

65. The Licensee shall comply with the Acid Based Accounting Test Program that is appended as appendix 6 to this licence.

Thickened Tailings Disposal Area

66. The Licensee shall record thickener underflow density on a daily basis and shall include this data in the monthly reports that are a requirement of the water quality surveillance program.
67. In September of each year of this Licence, the Licensee shall complete full depth sampling of the thickened tailings at four sites along the center line of the tailings deposit. The samples shall be logged in the field for the presence and quantity of frozen tailings. Representative samples shall be collected for laboratory analyses of grain size distribution, densities and moisture content. The results shall be submitted as a component of the annual report.

Flow Monitoring Plan - Lower Minto Creek

68. Prior to the initial filling of the water storage pond, the Licensee shall submit to the Board a plan for the monitoring of flows in lower Minto Creek.
69. The Flow Monitoring Plan - Lower Minto Creek shall include triggers and action plans to ensure that there are no impacts to fish as a result of the filling of the water storage pond and shall include a description of the information that will be reported to the Board as well as a schedule for reporting of that information.
70. The Licensee shall implement the Flow Monitoring Plan - Lower Minto Creek within six months of submitting that plan to the Board.

Groundwater Monitoring Plan

71. On or before the first anniversary of the start up date, the Licensee shall submit to the Board a Groundwater Monitoring Plan.
72. The Groundwater Monitoring Plan shall be designed in order to monitor potential groundwater contamination related to the waste rock/overburden dumps.
73. The Groundwater Monitoring Plan shall include at least two groundwater monitoring wells below the toe of each of the waste rock and overburden dumps. The siting and depth of these wells shall be based on the hydro geology of the area below the dumps and shall be selected to provide an early indication of the impact of the dumps on local groundwater quality.

PART G - DECOMMISSIONING AND RECLAMATION

Progressive Reclamation

74. The Licensee shall comply with the proposals for progressive reclamation activities that are described in exhibit 1.2.11 of the water use application.

Temporary Closure

75. The Licensee shall, within six months of the start up date, submit to the Board a detailed plan for temporary closure and shall implement this plan should any temporary closure occur. For purposes of this Licence, when ore has not been processed in the mill for a period of six consecutive months, then the status of the project shall be "temporary closure".
76. Should the Board notify the Licensee that a public hearing will be held to review the detailed plan for temporary closure, and if that notice includes a direction not to implement the detailed plan for temporary closure, then the Licensee shall not implement the detailed plan for temporary closure until such time as the public hearing has been held and the Board has concluded it's deliberations. However, should temporary closure occur prior the conclusion of Board deliberations, then
- a) All effluent quality standards of this licence shall continue to apply, and
 - b) All monitoring requirements of this licence shall continue to apply, and
 - c) All materials, including but not limited to stockpiles of concentrate, reagents, explosives and fuel, shall be secured on site in such a manner so as to prevent any discharge of a deleterious substance to any water course.
77. Any temporary closure for a period that exceeds three (3) years shall, for the purposes of this Licence, be considered to be permanent closure.

Permanent Closure

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.
79. The Comprehensive Decommissioning and Reclamation plan that is required by this licence shall be adequate for an independent assessment of the physical and chemical stability of the proposed mitigation and their costs and the plan shall include, but not be limited to, the following components:
- a) detailed designs for the closure of all major mine facilities, including dams, spillways, diversion ditches, pits, dumps and mill/camp facilities.
 - b) Plans to ensure long term stabilization of the tailings area, including revegetation.
 - c) Current calculations of Probable Maximum Flood ("PMF") and Maximum Credible

Earthquake (“MCE”)

- d) Plans for upgrading the Tailings/Water Dam to withstand PMF and MCE.
 - e) Plans for upgrading the Minto Creek Diversion Ditch to withstand the PMF.
 - f) An updated reclamation research program and program schedule.
 - g) An updated program and schedule for progressive reclamation to be carried out during operations.
 - h) A detailed post-closure monitoring program to verify that performance objectives for all facilities are being achieved.
 - i) An updated water balance and water quality model for the mine site and Minto Creek.
 - j) An updated cost estimate for decommissioning and on-going post closure monitoring and maintenance.
80. In the event of permanent decommissioning, then the Licensee shall implement the Comprehensive Decommissioning and Reclamation Plan that is required by this part of this Licence except that, should the Board notify the Licensee, within 90 days of the receipt of the Plan, that a public hearing will be held to review the Plan, and if that notice includes a direction that the Licensee is not to proceed with all or any parts of the plan, then the Licensee shall not implement the specified parts of the plan until such time as a public hearing has been convened and the Board has concluded it's deliberations.
81. In the event that the Board notifies the Licensee that a public hearing will be held to review the Comprehensive Decommissioning and Reclamation Plan, and in the event that permanent closure has occurred or is likely to occur, then the Licensee shall ensure that all physical structures are either removed or left in stable condition and that all discharges from the operation comply with all of the effluent quality standards that are required by this licence.
82. In the event that permanent closure occurs prior to the submission of the Comprehensive Decommissioning and Reclamation Plan, then the Licensee shall ensure that all physical structures are either removed or left in stable condition and that all discharges from the operation comply with the effluent quality standards which required by this licence.
83. All sulphide ore stockpiles shall be relocated to the pit prior to any permanent closure.

PART H - INTERIM CLOSURE

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

#	Description
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).
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

This office compilation includes only appendix 1