MINTO EXPLORATIONS LTD.

A Subsidiary of Capstone Mining Corp.

ENVIRONMENTAL MONITORING PLAN

June 2011

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1.0 INTRODUCTION

The Environmental Monitoring Plan (EMP) encompasses a range of monitoring activities that includes data collection, interpretation, and identification of triggers when there is a potential for an environmental effect, and responsive contingency plans to address potential risks. To the extent possible, a response is anticipated and planned for with an adaptive management strategy. In addition, the EMP includes ongoing monitoring of various environmental conditions such as meteorological conditions which may or may not require an adaptive management approach.

1.1 Regulatory Context

Minto Explorations Ltd. (MintoEx) operates under two main regulatory licenses:

- Water Use Licence (WUL) QZ96-006 Amendment #7, issued on March 31, 2011; and
- Quartz Mining Licence QML-0001 issued on May 19, 2011.

With guidance from external expertise, Minto Ex on-site technical staff and geotechnical consultants have adjusted the monitoring program requirements outlined in the WUL QZ96-006 Amendment #7, to reflect the dynamic and unresolved nature of various engineered structures on site and to accommodate new features required of the Environmental Monitoring Plans requested in Schedule B of QML-0001.

Included in the plan requirements is an adaptive management strategy that allows for flexibility in response to changing conditions. This strategy will be employed for all monitoring plans where applicable allowing for best management practices to adjust to changes in the performance of engineered structures and minimize any possible impacts to these structures. Minto Ex and the Minto Mine Site has structures and features that can be susceptible to environmental conditions and whose performance is measured by a number of operational monitoring programs, including but not limited to:

- Physical Stability Monitoring of various site structures including;
  - Tailings Stability Monitoring
  - SW Dump and South Wall Monitoring
  - Geotechnical Inspections for Reclamation Overburden Dump and Main Waste Dump
- Geochemical monitoring of waste rock storage facilities;
  - Metals Leachate/Acid Rock Drainage Issues (ML/ARD)
- Water Quality Surveillance for site and receiving waters;
  - Adaptive Management and Monitoring Plan
- Meteorological Monitoring
- Biological Monitoring

- Reclamation Effectiveness Monitoring Program

2.0 PHYSICAL MONITORING PROGRAM

A Physical Monitoring Program (PMP) is conducted at Minto Mine in accordance with Part F sections 60 through 62 and Appendix 2 of Water Use Licence QZ96-006 and additional clauses recently added as described in Parts E and G of WUL QZ96-006 Amendment #7. It entails regular geotechnical stability monitoring of key site structures (Water Storage Pond Dam, the Mill Water Pond, Waste Rock and Overburden Dumps, Tailings Facility and Water Diversion Ditches and Conveyance Structures) and annual physical inspection of these facilities by a registered professional engineer. Minto Mine staff regularly liaises with the engineer of record for these mine components. Occasionally, additional monitoring is recommended through regular inspections. As such, the scope of physical monitoring conducted is continually adapted in accordance with observations in the field.

Slope stability monitoring was introduced as the pit depth increased, primarily for safety reasons. Instrumentation was installed on the south wall of Area 1 Open Pit, the Dry Stack Tailings Storage Facility, and Southwest Waste Dump. These areas are monitored for ground movement from deep seated and shallow failures and include data from survey hubs, ground temperature cables and DSI slope inclinometers. Minto staff, in conjunction with the engineers of record, also monitors surficial cracks as they appear. Additional visual monitoring for stability of the side slopes on all dump sites are performed on a regular basis, and in depth annual inspections are performed by a professional engineer on all engineered dumps, the tailings facility and water storage pond dam at least annually and in practice more frequently on an as-required basis. Safety factors are the primary considerations driving physical monitoring frequency and instrumentation requirements. As-built designs and monitoring coverage are adapted accordingly.

2.1 Tailings Stability Monitoring

An operational adaptive management program (AMP) has been proposed for the Tailings Storage Facility in the Operation Maintenance and Surveillance Manual (OMS), and is based on data collected through the monitoring initiatives proposed in the same document. The AMP for this facility focuses on the physical and chemical stability of the tailings materials. Current monitoring of the DSTSF indicates that the facility is subject to movement and the Mill Valley Fill (MVF) has been designed as a buttress to address this movement. Additional instrumentation is being installed to monitor this movement along with the new instrumentation already added in 2010. A monitoring program to track the movement rates following construction of the MVF will assess and substantiate the need for further contingency measures which may include adding additional material to the MVF.

Instrumentation currently installed at the DSTSF includes:

- 10 survey hubs at the toe key structure

- 5 inclinometers
- 7 ground temperature cables
- 2 vibrating wire piezometers

Monitoring frequency, and triggers and thresholds for response actions are described in detail in the OMS for the DSTSF. It includes, but is not limited to; ground temperature triggers, lateral movement triggers, tailings core characteristics, moisture contents and ML/ARD triggers. An annual inspection is performed by a registered professional engineer. Specific details of the monitoring plan are available in Appendix A, "Operation, Maintenance, and Surveillance Manual, Dry Stack Tailings Storage Facility, Minto Mine, YT", January 2011.

2.2 South Wall Monitoring

Any mandated monitoring requirements regarding the South Wall failure are now obsolete as the wall has failed and the South Wall Buttress is obsolete as it was intended to buttress the area that has already failed. We are however monitoring the road and survey hubs along the 810 bench once a day. As well, we are monitoring the inclinometers to the South of the haul road every two weeks.

There are 3 slope indicators on the south wall at the contact to the bedrock and a total of 9 survey hubs; 5 surrounding the haul road and 4 on the 810 bench of the Area 1 Pith. Minto Ex is currently investigating a number of contingency measures based on this failure in accordance with EBA recommendations. The tracking of the south wall failure is a good working example of setting trigger thresh holds and responding to these risks. The accelerated movement was noted through the instrumentation and an appropriate response issued to clear all personnel and equipment from the Area 1 Pit before the ultimate failure in April 2011. An annual inspection is performed by a registered professional engineer. Specific details of the monitoring plan are available in Appendix B, "Technical Memo: Area 1 Open Pit – Southern and Western Permafrost Overburden Slope Stability Monitoring", March 23, 2011.

2.3 Southwest Dump Monitoring

At The Southwest Dump (SWD) Minto Ex is currently monitoring:

- 9 Survey hubs; monthly
- 2 Slope Indicator holes; twice a month
- 4 Ground Temperature Cables (GTC); monthly
- 6 Vibrating Wire Piezometer; monthly

Performance monitoring is an integral part of the design, construction, and operation of the SWD. The results of the monitoring program form the basis of an adaptive management process that continually reviews the operation of the dump and will provide data for the final closure plan. The monitoring program has the same considerations for long-term creep to contend with as the DSTSF due to the presence of permafrost conditions and an overburden clay interface that has the potential to shear from

loading. The risk factor is lower due to the placement of competent waste rock at the perimeters and restricting overburden placement to dedicated areas. A program for visual monitoring of the slope, crest and toe of the dumps are performed regularly and surveyed at the discretion of the engineer on record for signs of deformation. A program of adaptive management practices is assumed for the various threshold warning levels and are established in Appendix C "Geotechnical Design Proposed Southwest Dump Minto Mine, Yukon", issued to MintoEx in September 2008. An annual inspection is performed by a registered professional engineer.

2.4 Main Waste Dump

The Main Waste Dump is located in the northwest corner of the Minto Mine project area and in the original design was built on the bedrock contact. Therefore the build-up of pore water pressure and the lack of soil sizes susceptible to liquefaction, combined with a competent bedrock contact devoid of permafrost, reduce the risk factor considerably. Nonetheless, two slope indicators are installed on the Main Waste Dump and are monitored monthly. Annual inspections are performed by a registered professional engineer.

2.5 Reclamation Overburden Dump

The Reclamation Overburden Dump is located northwest of the Main Waste Dump and is built on the same competent ground as the Main Waste Dump. Performance is monitored visually on a monthly basis and through on-going survey and as-built designs. Visual monitoring includes observation of the crests, slopes and toes and in particular monitoring for the deposition of ice-rich versus non-ice rich soils to ensure that ice rich soils are deposited in the Ice-Rich Overburden Dump (IROD). The ROD is a temporary structure as a large amount of the material deposited here will be used for cap and cover of the waste dumps and tailings upon closure and through progressive reclamation. An annual inspection is carried out by a professional Geotechnical Engineer. Specific details of the monitoring plan are available in Appendix D, "Geotechnical Design Proposed Reclamation Overburden Dump Minto Mine, Yukon", February 2008.

3.0 GEOCHEMICAL MONITORING

MintoEx initiated geochemical monitoring in accordance with WUL QZ96-006 Part F section 65 and in Appendix 6 outlined an acid-base accounting (ABA) program designed to test the results presented in a geochemical characterization report presented during environmental screening for Minto Mine. This report predicted that the open pit wall rocks would be net neutral to slightly acid consuming (non-acid generating). Results to date indicate that the open pit wall geochemistry is consistent with the initial geochemical predictions put forward in the original geochemical characterization report.

Outside of the scope of the ABA program, kinetic geochemical testing is currently being conducted as part of ongoing environmental assessment baseline work. As part of the Phase IV Expansion application to YESAB submitted in August 2010, MintoEx developed a metal leaching/acid rock drainage (ML-ARD) assessment. The results of the work undertaken to formulate this assessment characterized both the

waste rock and tailings materials during the mine life with respect to metal leaching and potential for acid rock drainage. The results of this work are being used to guide the placement of waste materials during operations, ensuring that materials with ML-ARD potential are tested for use as general construction materials, unless absolutely necessary, and is confined to the assigned waste placement areas. The Company will specify distinct areas for any such material within the waste storage areas, such that should alternate closure measures be required for this material, they will be readily accessible and accurately delineated. This operational information collected, coupled with the proposed closure monitoring of the waste storage areas, will be used in preparing and implementing an Adaptive Management Plan for ML-ARD issues site wide, to be prepared and ready for implementation at closure.

The ML-ARD and Acid Base Accounting Test Program involves regular monitoring and testing of waste rock and tailings mining waste for acid generation/buffering and metal leaching potential; this includes but is not limited to; full scale field lysimiters, barrel leachate trials, and predictive water quality modeling.

The on-site testing also includes a Seepage Monitoring Program designed to eliminate any unknown sources that may be contributing to poor water quality either as high concentrations of leachates or low pH values. Triggers used for adaptive management of leachates is conducted through an ongoing review process by professional engineers from Access Consulting and is outlined in the following documents; from the Phase IV YESAB application and from the WUL QZ96-006 Amendment #7, respectively. Appendix E, “Minto Mine Expansion- Phase IV ML/ARD Assessment And Post-Closure Water Quality Prediction” August, 2010 and Appendix F, “Minto Mine Seepage Monitoring Plan Version 2011-01”, June 22, 2011.

4.0 WATER QUALITY SURVEILLANCE FOR SITE AND RECEIVING WATERS

Water quality monitoring at Minto Mine began in accordance with WUL QZ96-006 Part F sections 58 and 69 and defined further in Appendix 3, adhering to effluent standards in Part E. This program included daily, weekly, monthly and quarterly monitoring of surface water quality at various background sites, sites in the area of operations, points of compliance and receiving water sites. In fall 2009, MintoEx submitted a revised Water Management Plan to YESAB as required under WUL Amendments 4 through 6. In March 2011, Amendment 7 to the WUL was issued with significantly revised effluent standards (Part F, sections 52 through 57) and an expanded monitoring program defined in Appendix 3. In May 2011, MintoEx resubmitted an Adaptive Management and Monitoring Plan (AMMP) to the Yukon Water Board for review and approval. This plan is still under consideration by the Board. The AMMP as proposed is summarized below and enclosed as Appendix G, “Adaptive Management and Monitoring Plan Minto Mine, Yukon Territory. May 2011.”

4.1 Adaptive Management and Monitoring Plan

The AMMP provides specific methods and techniques for water sampling and monitoring as well as threshold triggers for action based on water quality observed in the field and tested on site in an

environmental laboratory. This plan is designed to implement the adaptive approach described in the Water Management Plan (Yukon Water Board, application QZ09-094). The goal of the AMMP is to verify water quality results predicted by the models described in the Water Management Plan. It contains mechanisms for protection of aquatic resources through early warning and adaptation of the monitoring and response. The AMMP is crucial to the management of water and effluent discharge at the site.

There are a total of 29 water quality monitoring stations throughout the site. In its simplest form, impacted water will be contained on site for treatment and discharge. The AMMP strategy includes the ability to treat and test water on site. The on-site lab will be able to produce improved turn-around time for results and allow for rapid response to changing conditions at both compliance points; end-of-pipe and in the receiving environment. During the mine life, the scenario of discharging water will be termed an "Event" and so monitoring will typically characterize non-discharging periods. Typical parameters will be measured both in the field and at the external lab including:

- Physical measurements (pH, electrical conductivity and temperature) measured in-situ. Dissolved oxygen will be measured during AMMP events using an YSI multi-meter.
- Routine parameters (TSS, alkalinity, hardness, etc. Full suites of parameters listed in Table F-1).
- Total metals
- Dissolved metals
- Nutrients (ammonia, nitrate, nitrite, phosphorus, etc.)

The AMMP is the guiding document and outlines the actions taken in response to values received from the on-site laboratory for regulated water quality parameters. These are measured at one of the water conveyance network collection areas and compared to effluent quality standards for the end-of-pipe ("compliant" water):

- W15 sump
- W12 Pit Water
- Water Treatment Plant waters
- WSP water (W16)

The results will be verified through duplicate samples, external laboratory analysis and increased frequency sampling. If required, the decision to discharge will be based on on-site results. The circumstances of the trigger activation will be documented and reported. When there is a desire to discharge water, monitoring frequency will increase to Level 2 at these locations:

- Source waters (one of the above locations)
- W3
- MC1
- W2

MintoEx still intends to make decisions regarding discharge based on water quality results measured on site and notify appropriate agencies of the intent to discharge 24 hours in advance. As indicated above, MintoEx will establish a reasonable agreement between the on-site and external laboratories in advance and adhere to a QA/QC program, as required under WUL QZ96-006 Amendment #7 clause 20. Specific details of the AMMP are available in Appendix G.

5.0 WEATHER MONITORING

Monitoring of meteorological parameters is conducted via an Onset HOBO Weather Station, which includes meteorological instrumentation, a data logger and enclosure mounted on a 3-m tripod. The station is located approximately 100m northeast of the airstrip and has been operating since 2005. Data from the station has been collected regularly and is used for development and operational planning purposes. In 2010, following recommendations made by RWDI AIR Inc., a research-grade weather station, including a 10-m tower, was installed to replace the existing HOBO weather station. Particulate matter monitoring equipment has also been installed, to quantify the levels of PM10 and PM2.5 observed in camp.

6.0 BIOLOGICAL MONITORING

Pursuant to the requirements under QML-0001 (Schedule B) and WUL-QZ96-006 (clause 72) the following describes the annual biological monitoring programs for sediment, periphyton, benthic invertebrates and fish and fish habitat. To better understand the relationship between water quality and potential impacts on aquatic biota a more intensive stream sediment study will also be undertaken Sampling will be conducted annually during/throughout the open water season on the Minto Creek watershed and reference systems (where applicable). Annual reports detailing each sampling program, results and interpretation of those results will be prepared and submitted with the annual reports required for QML-0001 and WUL-QZ96-006.

6.1 The Sediment and Benthic Invertebrate Program

This Monitoring Program will evaluate the condition of the benthic invertebrate community of Minto Creek and provide data to allow interpretation of the potential influence of the Minto Mine on the benthic invertebrate community using temporal comparisons and spatial comparisons (control-impact design). This monitoring is to be conducted in addition to benthic invertebrate community monitoring required every three years as part of Environmental Effects Monitoring (EEM) under the Metal Mining Effluent Regulation of the federal Fisheries Act. Another purpose of this plan is to monitor sediment quality of Minto Creek and to provide data to allow interpretation of the potential influence of the Minto Mine on sediment quality using temporal comparisons, spatial comparisons (control-impact design) and Canadian Environmental Quality Guidelines for sediment (CCME 1999). Specific details of the Benthic

Invertebrate Monitoring Program are addressed in Appendix H, "Description of WUL Sediment and Benthic Monitoring", June 2011.

The current water use licence requires sampling of benthic invertebrates every two years at four stations (W2, W3, W6, and W7). Two cycles of sampling have been conducted to date and both demonstrated limitations with using W6 and W7 as reference sites. Both sites are very limiting in terms of suitable cobble substrate where benthic samples can be obtained. Therefore, reference sites will be re-situated to creeks within the vicinity of Minto Creek with similar physical characteristics. Additionally, sampling will be conducted annually as opposed to biannually and will follow protocols outlined in MMER's Environmental Effects Monitoring (EEM) Program. An effects assessment on benthic invertebrates is also required under MMER as part of the EEM program on two or three year cycles. Sampling for years 1 and 2 will be conducted following methods and protocols according to the MMER EEM Cycle II Study Design for the Minto Mine. Sampling beginning in year 3 will revert to the frequency dictated by the EEM Program (i.e. 2 to 3 year cycles)

6.2 Fisheries Program

An annual fisheries monitoring program will be conducted in order to assess and characterize fish usage in Minto Creek. The annual program will focus on the most predominant species using the system, Chinook salmon, but will also characterize potential use by other species (i.e., slimy sculpin, arctic grayling and round whitefish have been previously captured in low numbers). Usage and characterization will be primarily focused on extent and timing of use as well as quantitative use. Relative use of Minto Creek will be reported for each sampling interval through determination of Catch per Unit Effort (CPUE). A description of water chemistry in the receiving environment and mine discharge actions during the open water period will also be reported. Specific details of the fisheries monitoring program are addressed in Appendix I, "Minto Creek Annual Fish Monitoring Program", June 2011. An annual report will be prepared detailing the results of the sampling program.

Sampling for effects on fish is not currently a requirement in the WUL. An effects assessment on fish however is a requirement under MMER as part of the EEM program. As with the benthic invertebrate program, the EEM program requires studies be conducted every two to three years. However, MintoEx will conduct additional fish studies in Minto Creek on an annual basis to characterize fish usage of the system (timing, duration and extent) by juvenile Chinook salmon and other species, and to monitor possible use of lower Minto Creek by adult Chinook during their spawning period.

6.3 Periphyton Program

Periphyton is a type of algae that attaches itself to stream substrate and is directly affected by physical and chemical changes that occur in a stream over time. MintoEx will initiate a program to track the influence of mining activity on the periphyton community in Minto Creek. Sampling for periphyton will be

conducted annually assessing relative abundance and community composition. Sampling is relatively easy and will be conducted at the same stations where benthic invertebrates were collected. As with the benthic monitoring program, sampling will be conducted in late summer/early fall. Year to year comparisons will be made with respect to community composition, and diversity as well as a review of tolerant and/or sensitive taxonomic groups Specific details of the periphyton monitoring program are addressed in Appendix J, "Periphyton Monitoring Program", June 2011. An annual report will be prepared detailing the results of the sampling program.

7.0 RECLAMATION EFFECTIVENESS MONITORING PROGRAM

Monitoring details are outlined and detailed in the Detailed Reclamation and Closure Plan Rev3.1 and have been specifically scoped to fulfill the requirements under the Yukon Environmental and Socio-economic Assessment Act (YESAA) for quartz mining projects proposed in the Yukon. It is important to understand that activities associated with Phase IV of the Minto Mine have not yet been constructed and as such there may be changes to designs, or situations encountered during infrastructure development, that impact on the information presented in this document.

A systematic approach to decommissioning and closure reclamation has been developed for the Minto project. Progressive reclamation measures will be implemented where possible during mine construction and operations. This approach will not only provide valuable reclamation success feedback for use in advanced/final closure, but progressive reclamation will reduce final reclamation liability and costs and shorten the overall reclamation implementation schedule. These progressive efforts will also help reduce slope erosion through physical slope stabilization and re-vegetation efforts, enhancing ultimate reclamation success.

The overall goal of closure at the Minto site is to leave the area as a self-sustaining ecosystem, ensuring that land use after closure is compatible with the surrounding lands, and that the site vegetation returns to a state as near as possible to that in existence prior to mining activities. Operations phase material characterization programs and the application of passive mitigation treatments such as engineered covers to reduce metal loadings from mine infrastructure components are the primary means by which the Company proposes to achieve this goal.

Reclamation monitoring for the Minto Mine Site to date has focused primarily on vegetation trials, soil composition studies and nutrient availability. Through annual inspections of reclamation plots measured for growth and coverage, Minto Ex, has determined a seed mix suitable for initial re-vegetation, to establish colonization by native vegetation, amend the soil and promote evapotranspiration. Developing a primary cover crop will encourage the establishment and growth of species of hedges, shrubs and trees which will be tracked though the reclamation monitoring program. Secondly, and in conjunction with developing ground cover is to build an engineered soil cover or cap over the dumps and tailings to decrease infiltration and reduce the potential for rapid oxidation and weathering of the waste rock and tailings. Infiltration monitoring will be carried out through a full scale lysimeter trial during the summer of 2011. These studies will monitor the effectiveness of the covers based on cover thickness, soil fractions

and soil gradients to prevent water infiltration. Decreasing water infiltration is shown to have a positive correlation to improved water quality and reduced metal loadings. Monitoring for reclamation effectiveness will continue into post closure through ongoing water quality monitoring and re-vegetation monitoring. Full details of monitoring efforts that will occur through closure and post closure are detailed in Appendix K "Decommissioning and Reclamation Plan Minto Mine, Yukon Territory", June 2011.

8.0 PERMAFROST PROTECTION PLAN

MintoEx proposes to incorporate additional or improved measures to monitor permafrost conditions into the Physical Monitoring Program described above. This information will be used to update engineering plans throughout the site and minimize thawing conditions wherever possible. The results will be summarized in the QML Annual Report.

Currently, permafrost conditions are monitored in a number of ways at Minto Mine including thermistors, ground temperature cables and survey stakes which are monitored regularly in accordance with the engineering design. The readings from these instruments provide valuable in-situ information that helps determine whether the related mine component (dry stack tailings, waste dumps, water retention dam, etc.) is performing as predicted by the design. The survey stakes provide information on small-scale ground movement that may indicate unfrozen conditions.

In addition, a meteorological station has been in place collecting continuous data on air temperature, precipitation, relative humidity, wind speed and direction, solar radiation and atmospheric pressure. This detailed log, along with information on regional and global climate trends will also be used to revisit engineering assumptions and if necessary revise thawing thresholds triggering actions. The review of this information is conducted as part of annual geotechnical inspections of various mine components (dry stack tailings facility, mine waste dumps, water retention dam, etc.) by the engineer of record

General construction practices in known permafrost regimes inform day to day earthworks at Minto Mine. These include the following:

- Avoiding deep snow accumulation in critical or sensitive permafrost areas; if practical and necessary, snow clearing in winter would result in colder ground.
- When possible, preserving the original surficial organic/peat layer; removing or compressing the organic/peat layer would normally result in a deep active layer and warm permafrost.
- When fill placement over the original ground is required, preferred practice would be placing the fill during late winter when the active layer in the original ground is completely frozen.
- When possible, avoiding ponding water over the permafrost.
- Depending on site conditions and construction schedule, placement of a thick fill (preferably light color) would help preserve the underlying permafrost.

- For areas where protection of the permafrost is critical, engineering measures coupled with thermal design and evaluation may be required.