

October 6, 2011

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Minto Explorations Ltd. Suite900-999 West Hastings Street Vancouver, BC V6C 2W2

Attention: Mr. John Knapp, General Manager

Subject: Southwest Waste Dump – 2011 Annual Review, Minto Mine, YT

I.0 INTRODUCTION

As requested, this letter presents a report by EBA Engineering Consultants Ltd. (EBA) resulting from a site visit completed to examine the current condition of the Southwest Waste Dump (SWD) at Minto Mine, YT. The intent of the site visit was to provide a geotechnical engineering report on the condition of the dump, in partial fulfillment of the requirements of the existing Quartz Mining Licence QML-0001.

EBA's last inspection of this site was in April 2010. This inspection is summarized in EBA's letter report "Southwest Waste Dump – 2010 Annual Review, Minto Mine, YT" dated September 11, 2011. EBA has used this background information to assist in assessing the recent performance of the site.

2.0 **OBSERVATIONS AND RECOMMENDATIONS**

Mr. Chad Cowan, P.Eng. of EBA's Whitehorse office completed a site visit on August 25, 2011. Specific details are presented in the following sections. Photographs were taken of the SWD during the visit. Selected photos are attached while the remainder are available for review in the EBA files, if desired.

2.1 Observations

Observations noted during the site visit are as follows.

- Minto is utilizing a series of benches and setbacks during dump construction (Photos 1 and 2). Benches of finer grained non ice-rich waste have been constructed back of the overall crest of the facility. These benches are being and will continue to be capped with coarse waste rock until the ultimate dump dimensions are achieved. Therefore, the exterior slope will be constructed with coarse waste rock only. This construction method follows recommendations outlined in the design report.
- Many of the benches of finer grained non ice-rich waste had not been levelled and there were noticeable areas of ponded water (Photo 3).
- The slopes appear consistent with original placement; no signs of slumping, bulging, or tension cracks were noted. No erosion was noted along the toe or within the dump (Photo 4).

- Safety berms are in place throughout the majority of dump.
- Minimal water seepage was observed flowing from the toe of the fill slope into the W-15 Detention Structure area (shown on Figure 1). The water was clear and with very low turbidity.

2.2 Recommendations

Minto understands that it is common practice to grade each bench prior to moving to the next and not leave unlevelled end dump piles. It is recommended that this practice be continued to promote surface water to drain off the facility and not pond on the bench.

The design report stipulates that only coarse waste rock should be used within the exterior slope of the dump (design toe to 30 m setback from ultimate design crest). Construction practices should account for this 30 m setback and the monitoring of material placement. Areas of overburden and waste rock should be surveyed to establish a clear record of material placement locations within the dump.

3.0 MONITORING INSTRUMENTATION DATA

Four ground temperature cables (SDT-1, -2, -3 and -4), three inclinometers (SDI-1, -2 and -3), and four vibrating wire piezometers (SDP-1, -2, -3 and -4) were installed in January and February 2010 to provide a means of monitoring the foundation conditions along the toe of the slope of the SWD. The location of these instruments is shown in Figure 1. In March 2011 nine survey hubs (SWD01, 01A, 02, 02A, 03, 03A, 04, 04A and-05A) were installed to monitor the surface movements along the south eastern perimeter of the material placement for the SWD.

3.1 Ground Temperature Cables

Ground temperature profiles from the four ground temperature cable locations (SDT-1, -2, -3 and -4) are presented in Figures T1, T2, T3 and T4. The four profiles show the readings that have been collected from the time of installation. The readings from each location indicate that the active layer depth ranges from 0.5 m to 1.0 m. Minto personnel should continue to take readings of these instruments every two months.

T1 indicates permafrost conditions throughout the overburden soils and in the bedrock. T2 through to T4 indicate permafrost conditions within the overburden soils, as the ground temperature cables terminate in the overburden soils and do not extend in to the bedrock.

3.2 Inclinometers

Profiles from the three inclinometer locations (SDI-1, -2 and -3) are presented in Figures SI1, SI1a, SI1b, SI2, SI3, SI3a and SI3b. SI1 shows continued marginal movement of the foundation soils in an easterly direction towards the Area 1 Pit. This movement is believed to be associated with the movements seen within the south wall of the Area 1 Pit. Up to February 25, 2011 SI2 showed marginal movement of the foundation soils and the rock fill in a south easterly direction. After February 25, 2011 readings have not been taken as there is refusal at the 2.5 m depth. SI3 shows next to no movement of the foundation soils and marginal movement of the rock fill in an easterly direction. Minto personnel should continue to take readings from these instruments monthly throughout the year.

3.3 Vibrating Wire Piezometers

Only the temperature data from the vibrating wire piezometers (SDP-1, -2, -3 and -4) can be monitored at this time as the vibrating wire tips were installed in the permafrost. The temperature data confirms that the subsurface soils at each of the vibrating wire piezometer locations is frozen (Figure SP1).

3.4 Survey Monuments

Movement data from the nine survey hub locations (SWD01, 01A, 02, 02A, 03, 03A, 04, 04A and-05A) are presented on the Figures SH1, SH1A, SH2, SH2A, SH3, SH3A, SH4, SH4A, SH5A. The data confirms that there is only noticeable movement at the north eastern corner (location closet to the Area 1 Open Pit). This movement is believed to be associated with the movements seen within the south wall of the Area 1 Pit.

4.0 LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Minto Explorations Ltd. and their agents. EBA, A Tetra Tech Company, does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Minto Explorations Ltd., or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this report is subject to the terms and conditions stated in EBA's General Conditions that are provided in Appendix A of this report.

5.0 CLOSURE

We trust this report meets your present requirements. Should you have any questions or comments, please contact the undersigned at your convenience.

Sincerely, EBA, A Tetra Tech Company



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FIGURES

- Figure I Site Plan Showing Observations and Instrumentation Locations
- Figure TI Ground Temperature Profile SDT-I
- Figure T2 Ground Temperature Profile SDT-2
- Figure T3 Ground Temperature Profile SDT-3
- Figure T4 Ground Temperature Profile SDT-4
- Figure SI I Slope Inclinometer Profile SDI-I
- Figure SIIa Inclinometer Displacement (East)
- Figure SIIb Inclinometer Displacement (West)
- Figure SI2 Slope Inclinometer Profile SDI-2
- Figure SI3 Slope Inclinometer Profile SDI-3
- Figure SI3a Inclinometer Displacement (East)
- Figure SIIb Inclinometer Displacement (West)
- Figure SPI Ground Temperature Profile for VW Piezometers SDP-2A, SDP-2B, SDP-3A, SDP-3B, SDP-4A, SDP-4B
- Figure SHI Survey Hub SWD01
- Figure SHIA Survey Hub SWD0IA
- Figure SH2 Survey Hub SWD02
- Figure SH2A Survey Hub SWD02A
- Figure SH3 Survey Hub SWD03
- Figure SH3A Survey Hub SWD03A
- Figure SH4 Survey Hub SWD04
- Figure SH4A Survey Hub SWD04A



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Installed: January 31, 2010 Latest update: 10-Jun-2011 *Statigraphy subject to change following lab program Southwest Waste Dump Ground Temperature Profile - SDT-2 Figure T2



Latest update: 10-Jun-2011 *Statigraphy subject to change following lab program Southwest Waste Dump Ground Temperature Profile - SDT-3 Figure T3



Latest update: 10-Jun-2011 *Statigraphy subject to change following lab program Southwest Waste Dump Ground Temperature Profile - SDT-4 Figure T4





















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Southwest Waste Dump Survey Hub-SWD03 Figure SH3



Southwest Waste Dump Survey Hub-SWD03A Figure SH3A







Southwest Waste Dump Survey Hub-SWD05A Figure SH5A

PHOTOGRAPHS

Photo I	Looking south along th	e eastern perimete	r of the SWD lowe	er waste rock bench.
	Looking south along th	e castern permitete		i waste rock benen.

- Photo 2 Looking northeast along the eastern lower waste rock benches.
- Photo 3 Looking south at the unlevelled non ice-rich waste on the crest of the SWD.
- Photo 4 Looking south at the lower perimeter benches of the SWD.





Looking south along the eastern perimeter of the SWD lower waste rock bench. (August 25, 2011)



Looking northeast along the eastern waste rock benches. (August 25, 2011)





Looking south at the unlevelled non ice-rich waste on the crest of the SWD. (August 25, 2011)



Photo 4 Looking south at the lower perimeter benches of the SWD. (August 25, 2011)



SOUTHWEST WASTE DUMP – 2011 ANNUAL REVIEW, MINTO MINE, YT EBA FILE: W14101068.037 | OCTOBER 6, 2011 | ISSUED FOR USE





GENERAL CONDITIONS

GEOTECHNICAL REPORT

This report incorporates and is subject to these "General Conditions".

1.0 USE OF REPORT AND OWNERSHIP

This geotechnical report pertains to a specific site, a specific development and a specific scope of work. It is not applicable to any other sites nor should it be relied upon for types of development other than that to which it refers. Any variation from the site or development would necessitate a supplementary geotechnical assessment.

This report and the recommendations contained in it are intended for the sole use of EBA's Client. EBA does not accept any responsibility for the accuracy of any of the data, the analyses or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than EBA's Client unless otherwise authorized in writing by EBA. Any unauthorized use of the report is at the sole risk of the user.

This report is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of EBA. Additional copies of the report, if required, may be obtained upon request.

2.0 ALTERNATE REPORT FORMAT

Where EBA submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed EBA's instruments of professional service), only the signed and/or sealed versions shall be considered final and legally binding. The original signed and/or sealed version archived by EBA shall be deemed to be the original for the Project.

Both electronic file and hard copy versions of EBA's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except EBA. EBA's instruments of professional service will be used only and exactly as submitted by EBA.

Electronic files submitted by EBA have been prepared and submitted using specific software and hardware systems. EBA makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

3.0 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, EBA has not been retained to investigate, address or consider and has not investigated, addressed or considered any environmental or regulatory issues associated with development on the subject site.

4.0 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

Classification and identification of soils and rocks are based upon commonly accepted systems and methods employed in professional geotechnical practice. This report contains descriptions of the systems and methods used. Where deviations from the system or method prevail, they are specifically mentioned.

Classification and identification of geological units are judgmental in nature as to both type and condition. EBA does not warrant conditions represented herein as exact, but infers accuracy only to the extent that is common in practice.

Where subsurface conditions encountered during development are different from those described in this report, qualified geotechnical personnel should revisit the site and review recommendations in light of the actual conditions encountered.

5.0 LOGS OF TESTHOLES

The testhole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

6.0 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from logs of test holes and/or soil/rock exposures. Stratigraphy is known only at the locations of the test hole or exposure. Actual geology and stratigraphy between test holes and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historic environment. EBA does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional investigation and review may be necessary.

7.0 PROTECTION OF EXPOSED GROUND

Excavation and construction operations expose geological materials to climatic elements (freeze/thaw, wet/dry) and/or mechanical disturbance which can cause severe deterioration. Unless otherwise specifically indicated in this report, the walls and floors of excavations must be protected from the elements, particularly moisture, desiccation, frost action and construction traffic.

8.0 SUPPORT OF ADJACENT GROUND AND STRUCTURES

Unless otherwise specifically advised, support of ground and structures adjacent to the anticipated construction and preservation of adjacent ground and structures from the adverse impact of construction activity is required.

9.0 INFLUENCE OF CONSTRUCTION ACTIVITY

There is a direct correlation between construction activity and structural performance of adjacent buildings and other installations. The influence of all anticipated construction activities should be considered by the contractor, owner, architect and prime engineer in consultation with a geotechnical engineer when the final design and construction techniques are known.

10.0 OBSERVATIONS DURING CONSTRUCTION

Because of the nature of geological deposits, the judgmental nature of geotechnical engineering, as well as the potential of adverse circumstances arising from construction activity, observations during site preparation, excavation and construction should be carried out by a geotechnical engineer. These observations may then serve as the basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein.

11.0 DRAINAGE SYSTEMS

Where temporary or permanent drainage systems are installed within or around a structure, the systems which will be installed must protect the structure from loss of ground due to internal erosion and must be designed so as to assure continued performance of the drains. Specific design detail of such systems should be developed or reviewed by the geotechnical engineer. Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function.

12.0 BEARING CAPACITY

Design bearing capacities, loads and allowable stresses quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition assumed. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions assumed in this report in fact exist at the site.

13.0 SAMPLES

EBA will retain all soil and rock samples for 30 days after this report is issued. Further storage or transfer of samples can be made at the Client's expense upon written request, otherwise samples will be discarded.

14.0 INFORMATION PROVIDED TO EBA BY OTHERS

During the performance of the work and the preparation of the report, EBA may rely on information provided by persons other than the Client. While EBA endeavours to verify the accuracy of such information when instructed to do so by the Client, EBA accepts no responsibility for the accuracy or the reliability of such information which may affect the report.