

OPERATED BY MINTO EXPLORATIONS LTD.

Supplement to the Phase V/VI Tailings Management Plan

February 2015

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1 Introduction

This document supplements the Phase V/VI Tailings Management Plan (TMP) submitted as Exhibit 1.6.4 in Minto's application for a renewed water license (QZ14-031). The document provides an update to the tailings and water balance for the Minto Mine site that was included in the YESAB Application for the Phase V/VI development of the Minto Mine. The updated tailings and water balance is based on the current volumes and available storage capacities as of 1 February 2015. The mining sequence used in the model for the period after February 2015 is identical to the plan included with the YESAB application, with the schedule for open pit mining adjusted to reflect a April 2015 start date for mining Minto North, and subsequent activities proceeding in sequence as described in the TMP.

2 Current Status of Phase IV In-Pit Tailings Management Facilities

Since November 2012, Minto has been depositing tailings into the Main Pit Tailings Management Facility (MPTMF). Tailings deposition to the Area 2 Pit will commence in Q1 or Q2 of 2015. The infrastructure needed to deposit tailings into the Area 2 pit is in place and operational.

2.1 Tonnage and Volume

From the start of tailings deposition on November 1, 2012 through December 31, 2014, approximately 2,933,000 tonnes of tailings have been deposited to the MPTMF. Using the design-basis settled bulk density of 1.1 t/m^3 , this corresponds to a placed tailings volume of 2,667,000 m³.

2.2 Ice Formation

To date, all tailings placed in the MPTMF have been deposited subaqueously. This has prevented ice entrainment within the bulk tailings. The temperature of the tailings at the discharge point (well above freezing), combined with the erosive effect of the slurry, keeps a permanent hole open in the ice that otherwise covers the pit lake throughout the winter. Tailings have not been observed to pool on top of ice.

2.3 Waste Rock with NP:AP < 3

During mining of the Area 2 pit, Minto began segregating waste rock with an NP:AP ratio less than 3.0 and dispatching it to the MPTMF. Segregation of this waste rock began in September 2012, and through April 2013 the NP:AP<3 waste rock was placed below the natural spill elevation of the Main Pit (791 masl) by dumping and progressively dozing the waste rock into the MPTMF pit lake. In April 2013, scheduling setbacks in the mining of the Area 2 Pit necessitated the deferral of tailings deposition into the Area 2 Pit Tailings Management Facility (A2PTMF). Therefore, to preserve MPTMF volume for the mine's water and tailings storage needs, placement of NP:AP<3 waste rock was moved to on the top of the existing buttress pad rather than into the MPTMF pit lake. This continued until the completion of Area 118 open-pit mining in October 2014, and resulted in the distribution of waste with NP:AP<3 present below a given elevation that is shown in Table 2-1.

Table 2-1: NP:AP<3.0 waste storage above 791m elevation.

From	To	NP:AP<3 Volume Within Interval	Cumulative NP:AP<3 Volume Below Top
(masl)	(masl)	(m^3)	Elevation (m ³)
811	812	2390	2390
810	811	5460	7850
809	810	10637	18487
808	809	12439	30926
807	808	12747	43673
806	807	13232	56905
805	806	13805	70710
804	805	14357	85067
803	804	14884	99951
802	803	15439	115390
801	802	16603	131993
800	801	21206	153199
799	800	34753	187952
798	799	48997	236949
797	798	52350	289299
796	797	52278	341577
795	796	52344	393921
794	795	55821	449742
793	794	57993	507735
792	793	58193	565928
791	792	58034	623962
791	791	57698	681660

The construction of the Main Dam will see most of this waste stored in saturated conditions at closure.

3 Phase V/VI Tailings Management Facilities

The Phase V/VI Tailings Management Plan proposes the following:

- Expansion of the MPTMF through the creation of the Main Dam;
- Expansion of the A2PTMF to include Area 2 Stage 3; and,
- Creation of the Ridgetop North Pit Tailings Management Facility (RNPTMF).

3.1 TMF Capacities

Table 3-1 summarizes the natural TMF storage capacities for the Phase V/VI in-pit TMFs.

Table 3-1: Natural storage capacities for Phase V/VI in-pit TMFs.

In-pit TMF	Approximate Spill Elevation (m above sea level)	Volume Below Spill Elevation (Mm³)
Main Pit TMF - Including Rockfill Pore Space	791	4.7
Area 2 Pit (Stages 2+3) TMF	799	7.7
Ridgetop North Pit TMF	862	1.9
Total v	14.4	

The MPTMF storage capacity will be increased to 7.7 Mm³ by building the Main Dam and filling to the full supply level (FSL) of 809 m, bringing the total storage capacity to 17.4 Mm³.

4 Tailings and Water Storage Requirements

The following table provides updated TMF volume requirement estimates.

Table 4-1: Storage requirements if Main Dam is not built.

Requirement		Note	Volume (Mm3)
Tailings processed to Dec 31, 2015		2,933,000 @ 1.1 t/m3	2.67
Tailings remaining (Jan 1, 2015 onwards)		9,460,000 t @ 1.1 t/m3	9.40
NP:AP < 3 waste from Phase IV + V/VI OP mining			2.24
Minimum operational volume required			0.60
Surge capacity			0.98
Total volume required in tailings management facilities			15.9

With the Main Dam built, the total capacity of TMFs on site is able to contain the volume of tailings and waste rock produced though Phase V/VI while leaving sufficient capacity for operational water storage, surge capacity and for any volume that may be occupied by ice entrainment within the tailings (which may occur in the case of beach deposition of tailings in winter months).

5 Tailings and Water Storage Forecast

This section presents an updated tailings deposition schedule to account for the delay of Phase V/VI openpit mining relative to the assumptions in the previously submitted Tailings Management Plan (Exhibit 1.6.4 in the register for the Phase V/VI Water Use License Application).

Figure 1 illustrates the cumulative waste rock and tailings storage schedule for Phase V/VI. The schedule shows the completion of Main Dam construction in October 2016 and completion of Area 2 Stage 3 in July 2017. The plan provides adequate volume for Minto's tailings, waste rock, and water storage requirements throughout the mine plan, and makes allowance for the possibility of inefficient storage that could result from ice entrainment.

Storage requirements include allowances for a reasonable surge capacity (975,000 m³), which is a requirement of the Phase IV water license. This surge capacity is the primary mitigation measure in the event that runoff collected on site cannot be released to Minto Creek. The storage capacity that is available *in addition to* the surge capacity is indicated as the solid purple and black lines in Figure 1. In other words, the solid lines on the Figure can be considered as the maximum operational storage capacity.

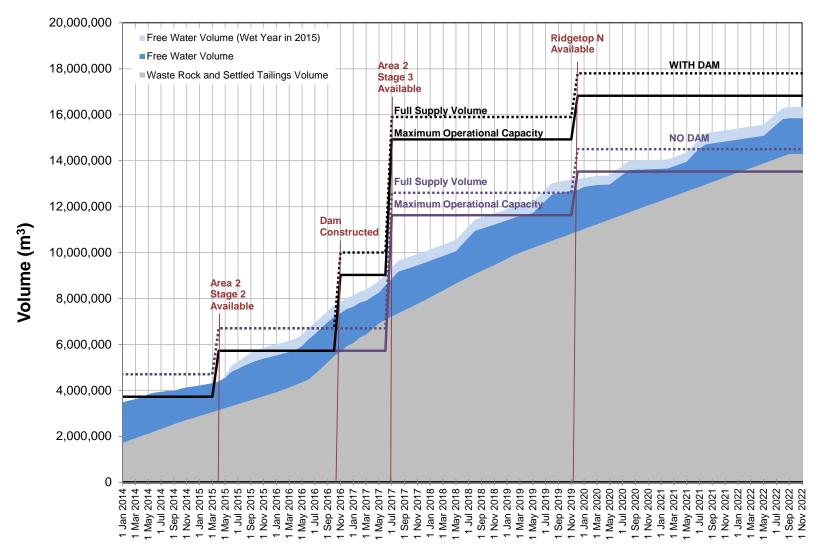
The planned storage capacity also includes an allowance for a minimum of 600,000 m³ of mill process water. Mill process water needs to be free water (volumes shaded blue) that can be pumped to the mill.

The estimated storage capacity required is deliberate conservative to ensure that reasonable contingency options are available for managing water on site. The use of a less conservative design basis would limit the available contingency measures and thereby result in a less robust water management plan.

The schedule assumes average annual precipitation. Should Minto experience more rainfall in 2015 or 2016, prior to the completion of Area 2 Stage 3 mining or Main Dam construction, the full capacity of the Phase IV Area 2 Pit is available as a contingency: this provides an additional 3.5 Mm³, though its use would delay the completion of Area 2 Stage 3.

Figures 2, 3 and 4 illustrate the waste rock, tailings and water infill schedule for the MPTMF, A2PTMF and RNPTMF.

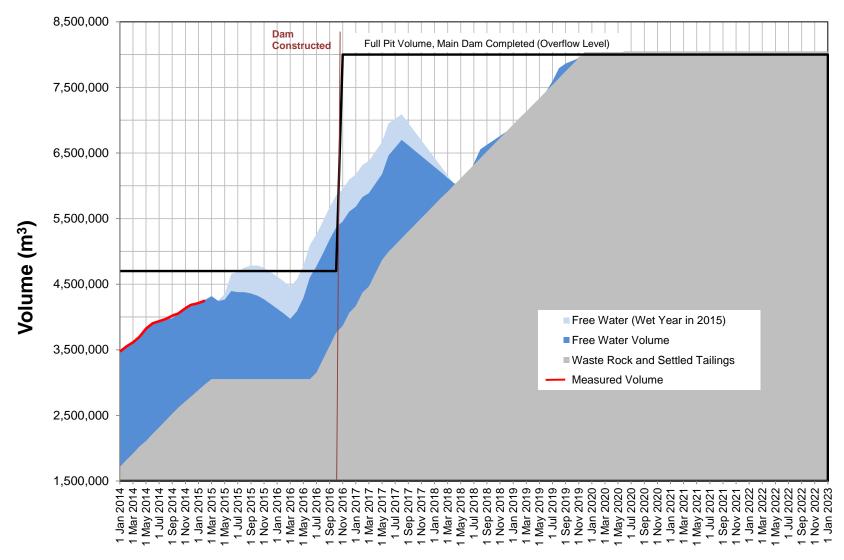
Combined Tailings, Waste Rock and Water Storage



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Figure 1 Cumulative Phase V/VI Tailings and Waste Rock Storage Schedule

Main Pit Volume

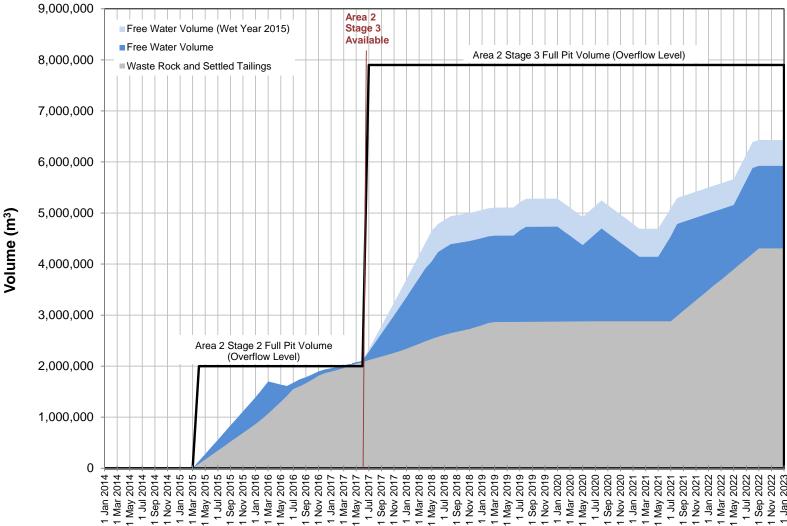


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Figure 2 Tailings and Waste Rock Placement in Main Pit

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Area 2 Pit Volume



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Figure 3 Tailings and Waste Rock Placement in Area 2 Pit

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Ridgetop Pit Volume

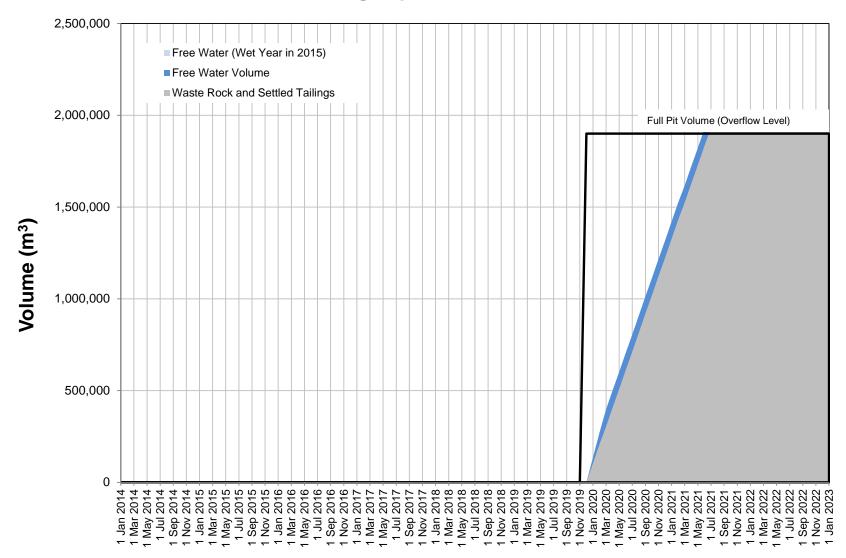


Figure 4 Tailings Placement in Ridgetop North Pit

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