Annexure 6:

Description of the Macraes Mine Water Management System



OVERVIEW OF THE MACRAES MINE WATER MANAGEMENT SYSTEM

This document provides a description of the Mine Water Management System ("**MWMS**") at the Macraes Gold Project ("**MGP**"), owned and operated by OceanaGold (New Zealand) Limited ("**OceanaGold**"). The use of water in the MWMS is a key part of the mining operation at Macraes.

OBJECTIVES OF THE MWMS

The MWMS at the MGP involves the management of water within the mine to achieve the following objectives:

- 1. To enable the use of water at the MGP to enable mining and activities ancillary to mining;
- 2. To ensure that a constant supply of water is available to the Processing Plant to enable unimpeded processing of ore;
- 3. To allow for the storage or water at locations across the mine prior to its use in the mining and processing of ore; and
- 4. To control discharges of mine impacted water to the wider environment such that compliance with instream water quality criteria is maintained.

ELEMENTS OF THE MWMS

The MWMS comprises of the following key elements:

- Open Pits which collect and store surface water runoff and groundwater inflow and may be used for temporary storage of water pumped from other elements of the MWMS;
- Underground Mines which collect groundwater inflow, including seepage from other mine features, and any operational water used in the course of developing or maintaining the underground mines;

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- Tailings Storage Facilities, which collect tailings slurry discharged from the Processing Plant, rainfall and seepage and are a primary source of water for the Processing Plant;
- Sumps and silt ponds which collect water from waste rock stacks, and other disturbed areas;
- Dams which provide for the temporary storage of water; and
- Above ground water storage infrastructure e.g. tanks, pipes and pumps.

The primary sources of water to the MWMS are:

- Rainfall and stormwater collecting in the elements listed above;
- Groundwater that is naturally intercepted by open pits and underground mines;
- Augmentation from OceanaGold's consented water take from the Taieri River which enters the MWMS at the Lone Pine Reservoir.
- Seepages from mine related elements such as Tailings Storage Facilities and Waste Rock Stacks.

MANAGEMENT OF THE MWMS

OceanaGold uses water conveyance infrastructure (primarily pumps and pipes) to move water between the various MWMS elements as required to meet its objectives. Water from the MWMS may be used in the Processing Plant, for dust suppression, to support ancillary mining activities e.g. vehicle wash down, fire suppression and use in workshops and yards or discharged from the site accordance with the discharge permits. Any discharges from the MWMS are managed in accordance with the conditions of OceanaGold's existing discharge permits.