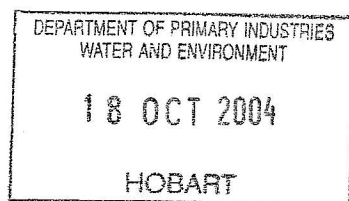


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ASSESSMENT COMMITTEE for DAM CONSTRUCTION



Inquiries Roger Simpson
Phone (03) 62 33 8856
Our ref 076061

12 October 2004

Director
Environment Division
Department of Primary Industries,
Water and Environment
GPO Box 44
HOBART TAS 7001

Dear Sir

EMPC Board Referral – Proposed Mine Waste and Tailings Dam, Oceania Pty Ltd.

The ACDC has assessed the proposed rock waste and tailings dam to be constructed at the Comstock Mine at Zeehan. The assessment has been restricted to the dam engineering and safety aspects. It has included a "desk-top" assessment of the downstream environmental impacts of a complete embankment failure and loss of the dam's contents. This was to determine a Hazard Rating as set out in the publication *Guidelines on Tailings Dam Design, Construction and Operation, October 1999* published by the Australian National Committee on large Dams ("the ANCOLD guidelines"), and the associated required level of specialist input to the design, construction and decommissioning stages of the project. We have assessed the Hazard Rating as High under the ANCOLD guidelines.

The proposed tailings dam design, as presented in the Management Plan dated 18 December 2003 prepared by Thompson & Brett Pty Ltd is sound and based on accepted tailings dam engineering practices, and generally in accordance with the ANCOLD guidelines.

As required by the *Water Management (Safety of Dams) Regulations 2003* the recommendations of the ANCOLD guidelines on engineering and other specialist input for a High Hazard tailings dam have been met for the investigation and design stage to date – mainly experienced mining and civil engineering firm Thompson & Brett and geotechnical firm Coffee Geosciences, supported by the company's own specialist geologist and laboratories at the University of Tasmania and Analabs Pty Ltd at Burnie.

Pursuant to section 165F of the *Water Management Act 1999*, the EMPC Board is required to include the following conditions in any approval or permit issued for the proposed dam works. Please note that the conditions are based on the recommendations in the ANCOLD guidelines for a High Hazard Rating tailings dam, in accordance with the *Water Management (Safety of Dams) Regulations 2003*.

Construction requirements

- The works must be carried out in accordance with the Waste Management Plan dated 18 December 2003, Reference No ZEEZ-01/R02, and Drawing Nos 03-2574-01 to 10, Rev P1, prepared by Thompson & Brett Pty Ltd.



Tasmania

GPO Box 44 Hobart 7001 TASMANIA

- Before site works commence, the company's consulting design engineer shall prepare an Operations Manual covering all main aspects of the embankment construction and tailings placement, inspections, water management, monitoring and reporting.
- The works must be supervised by a geotechnical/engineering specialist (the "supervising engineer").
- The works must be constructed by persons with relevant experience in the construction of large, high hazard earth and rockfill mine tailings dams. The persons must be selected and supervised by the supervising engineer.
- The names, addresses and details of relevant experience of the supervising engineer and the persons selected to construct the dam, verifying compliance with these conditions, must be submitted to the Manager, Water Management Branch at least 28 days before site works commence.
- Within 28 days after the completion of each stage of the dam works, as shown on the approved drawings, the dam owner shall submit to the Manager, Water Management Branch a "Work as Executed" report prepared by the supervising engineer, setting out full as-constructed details of the dam.
- The dam owner shall, in consultation with the supervising engineer, keep a full and detailed record and full copies of all reports and documentation relevant to the dam, including, but not necessarily limited to –
 - (i) All geotechnical, hydrological and engineering investigation and design reports;
 - (ii) All preliminary and final design plans and specifications for the dam, its construction and its performance monitoring;
 - (iii) All construction records and reports; any construction stage design modifications; instrumentation installation and monitoring reports; photographic records.
 - (iv) The operation manual required by Condition - -.
 - (v) All "Work as Executed" reports required by condition - -.

Surveillance requirements

Because of the height and potential environmental damage should the dam fail, it will be listed on the DPIWE's "Prescribed Dams" list and the following safety surveillance program must be implemented.

- Generally in accordance with the publication *Guidelines on Tailings Dam Design, Construction and Operation, October 1999*, published by the Australian National Committee on Large Dams, the dam owner shall arrange –
- annual inspections, audits and Operational Manual reviews and reports by the supervising engineer,
- rehabilitation phase inspection and decommissioning report by the supervising engineer and other specialists as required;
- provide a copy of all reports to the Manager, Water Management Branch within 28 days of the inspections.

The conditions are designed to ensure that the authorised works achieve appropriate dam safety objectives. In particular the conditions are to ensure the safe construction, operation and maintenance of the dam and the verification of these outcomes following dam construction.

If you wish further information in relation to our requirements or wish to discuss any aspect of your proposal further, please contact Roger Simpson on the number above.

Yours faithfully

A handwritten signature in cursive script, appearing to read "Dr Mike Temple-Smith". The signature is written in dark ink and is positioned above the printed name.

Dr Mike Temple-Smith
for the Assessment Committee for Dam Construction