

8th November, 2016

Broken Hill Operations Pty Ltd P Ø Box 5073 Broken Hill NSW 2880

Your ref:

Our ref: Blackwood

Att: Rob Williamson

Dear Mr. Williamson,

Re: Blackwood Pit Tailings Storage Facility - Prescription

The Committee wishes to thank Golder Associates Pty Ltd for its correspondence dated 5th October 2016, and the enclosed D1 Form and drawings, to raise the perimeter rim of an existing in-pit tailings storage facility at Broken Hill.

The above-mentioned documents have been reviewed by the Committee at its November 2016 meeting. Please be advised that the DSC will prescribe this tailings dam.

It is requested that a Design Report (including an independent peer review) and an assessment of the consequence categories (also clarifying the basis of determining the PLL figure) be submitted to the DSC's consideration prior to commencement of construction works.

Your continuing cooperation is appreciated. If there are any queries in regard to the above please do not hesitate to contact the undersigned.

Yours faithfully,

Steve Knight Executive Engineer

CC.

Fred Gassner
Golder Associates Pty Ltd
P O Box 6079
Hawthorn West VIC 3122

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email:



9th December, 2016

Broken Hill Operations Pty Ltd P O Box 5073 Broken Hill NSW 2880

Att: Rob Williamson

Our ref: Blackwood

Your ref:

Dear Mr. Williamson.

Re: Blackwood Pit Tailings Storage Facility - Design Report

The Committee wishes to thank Golder Associates Pty Ltd for providing the Design Report for the proposed Blackwood Pit Tailings Storage Facility at Broken Hill for consideration. The Design Report received on 21st November 2016, has been reviewed by the Committee at its December 2016 meeting. The overall design conforms to the Committee requirements. Dam owners and their engineers remain at all times responsible for the safe design and construction of a dam.

The Committee wishes to clearly state that it does not have a role of approving designs, but is required to assess the safety of a dam or proposed dam. In this regard its interest is primarily confined to major aspects of the design concept, such as the flood security level and the structural stability criteria. On these matters the Committee has developed requirements by which it makes its assessment.

The Committee is willing to comment on whether a design or constructed dam accords with Committee safety requirements. Such advice must not be construed or relied upon as anything more than such a comment – it must not, for example, be construed as an approval that the dam or design for a dam is safe or effective.

You should also understand that the Committee does not undertake detailed design checks and its advice that a proposal accords with Committee requirements is not to be construed as endorsement of design calculations or details. The Committee relies in its assessment on the knowledge, experience and diligence of the dam owner's engineer for the correctness of design work and for construction of the works in accordance with design requirements.

You should also be aware that while the Committee does not have a role in approving a design for a dam, that pursuant to section 18 of the Dams Safety Act, 1978 the Committee may issue a notice to a dam owner to ensure the safety of a dam where the Committee is of the view that a prescribed dam is unsafe or is in danger of becoming unsafe.

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Phone: Fax: http: email: (02) 9842 8073 (02) 9842 8071 www.damsafety.nsw.gov.au dsc@damsafety.nsw.gov.au



If the project proceeds the Committee requires you to provide the <u>Engineer's "Dam Construction Certificate"</u> (copy attached) to the plans and specifications, as varied if appropriate, and the relevant construction standards. Any inspection by the Committee staff or members must be seen in the same context as the review of plans and documents; that is a general overview, reliant on the owner's arranging of the appropriate inspections and controls. In addition, <u>a Construction Report containing Work-As-Executed drawings and construction photos</u> is to be submitted to the Committee as soon as practicable after completion of construction.

The Committee wishes to emphasise on need for appropriate construction supervision.

The Committee advises that it does require a Dam Safety Emergency Plan (DSEP) to be prepared and a copy submitted to the Committee prior to commencement of tailings deposition. Similarly, an Operation & Maintenance Manual is required to be prepared for use by the owner, specifying strict emplacement protocols are in place as to ensure that intended design functions are met.

The Committee also requires owners of all prescribed dams in NSW to organise the preparation and submission of surveillance reports in respect of their dams at the completion of the dam's first substantial filling (or one year after completion of dam construction) and thereafter at annual intervals. In this regard, given the dam life has short term and hazard category is at High A, the Committee requests that a Type 1 Surveillance Report be prepared for your dam at 2 yearly intervals and Intermediate Surveillance Report on annual basis to summarise progress with the dam, until decommissioning.

Although the Committee requires these yearly reports, it is emphasised that surveillance activities (i.e. daily inspections and monthly piezometer monitoring of the dam), should be undertaken regularly, and at times of unusual events (e.g. flooding, earthquakes). In this regard the Committee has endorsed the publication "Guidelines on Dam Safety Management 2003", prepared by the Australian National Committee on Large Dams (ANCOLD) and your attention is drawn to that publication for more information on the surveillance of dams.

Your continuing cooperation is appreciated. If there are any queries in regard to the above please do not hesitate to contact the undersigned.

Yours faithfully,

Steve Knight Executive Engineer

cc. Fred Gassner
Golder Associates Pty Ltd
Level 3, Building 7, Botanicca Corporate Park
570 – 588 Swan Street
Richmond VIC 3121



New South Wales Government

Dams Safety Committee



D9 form

DAM CONSTRUCTION CERTIFICATE

For			Dam
I hereby certify that the works associated with			
		Name of Owner's Engineer	
		Signature of Owner's Enginee	er
	21-3.3	Date	