

DSC2F

June 2010

OPERATION AND MAINTENANCE FOR DAMS

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1. INTRODUCTION

The *normal requirements* of the DSC are set out in its guidance sheets with its principal guidance sheet, *DSC Background, Functions and Operations - DSC1A*, outlining the DSC's general operations and authority. The DSC considers that effective and ongoing operation and maintenance programs are essential to ensure the continued viability and safety of a dam and its appurtenant structures. Accordingly, this guidance sheet is provided for the guidance and direction of dam owners, and their consultants, in the operation and maintenance of their dams.

2. OPERATION AND MAINTENANCE

The Operation and Maintenance (O&M) Manual for a dam is designed to collect together the background data and complete, accurate and current operating instructions for the dam and its appurtenant structures. Procedures for preparing appropriate manuals are outlined in the *ANCOLD (Australian National Committee on Large Dams) Guidelines on Dam Safety Management - 2003*. Additional information will be found in the references and publications cited in the ANCOLD Guidelines.

O&M Manuals should be prepared by appropriately qualified and experienced personnel including specialists such as Civil, Mechanical, and Electrical engineers as required by the type and complexity of the dam and its equipment.

The DSC requires the owners of all EXTREME, HIGH and SIGNIFICANT Consequence Category dams, and all prescribed tailings dams, to have an effective O&M Manual prepared for their dams. These manuals are to be regularly upgraded (at least every 5 years). The DSC recommends that owners of other dams in NSW should have appropriate O&M Manuals prepared for their dams to maximise their ongoing viability and safety. Owners of prescribed dams shall incorporate in their O&M Manuals a formal incident reporting system. The process shall be both internal and to the DSC (See DSC2A and DSC2B).

Owners of prescribed dams are to ensure that there are appropriately trained and experienced personnel available to operate and maintain their dams in accordance with their O&M Manuals.

Owners of EXTREME, HIGH and SIGNIFICANT Consequence Category Dams, and all prescribed tailings dams, are required to have training plans in place for their staff and ensure that their staff have attended a recognised course in dam safety. Further, those owners shall have a policy of ongoing staff education to include, as a minimum, refresher courses at regular intervals (i.e. 5 yearly for Extreme and High A Consequence Category dams ranging out to 10 yearly for Significant Consequence Category dams) to ensure they are kept up to date with latest developments in surveillance practices and maintain their knowledge of surveillance procedures.

3. RECORDS TO BE KEPT BY DAM OWNERS

The DSC requires, in conjunction with the requirements of the State Records Act 1998, that dam owners have an effective long-term archiving system to maintain appropriate records (ie design reports, construction reports and records, work-as-executed drawings, inspection and surveillance reports, safety reviews, O&M Manual, DSEP etc) of the operation and maintenance planning for their dams. This background information is particularly important when reviewing or upgrading dams.

This Guidance Sheet is one of a series available from our Website at:


<http://www.damsafety.nsw.gov.au>

In order to read this file you need a Portable Document Format (PDF) reader. A free PDF reader is available from <http://www.adobe.com/>


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