

**DSC2E**

June 2010

## **SOME LEGAL CONSIDERATIONS FOR DAMS OWNERS**

### **Table of Contents**

<b>Item</b>	<b>Page</b>
1. Introduction .....	2
2. Scope .....	2
3. Owners Legal Liability for Dam Safety .....	2
4. Owners Responsibility for Dam Operation, Maintenance and Surveillance .....	4
5. Government Bodies Involved in Dam Safety .....	4
6. Responsibilities for Emergency Management of Dams.....	6

## 1. INTRODUCTION

The NSW Dams Safety Committee's (DSC) principal objective is to ensure the ongoing safety of all prescribed dams in NSW. To assist in this regard, the DSC has prepared this Guidance Sheet as one of a series of educational sheets for owners and other stakeholders in the dams industry. The reader is directed to the DSC's Guidance Sheet on *DSC Background, Functions and Operations - DSC1A* for a listing of the DSC's other Guidance Sheets.

## 2. SCOPE

This sheet is provided to outline some of the legal issues, and related DSC criteria, which must be considered by dam owners or persons proposing to construct or modify dams. It is not intended to represent a definitive legal document, but rather it is an aid to assist in identifying matters requiring consideration and action.

## 3. OWNER'S LEGAL LIABILITY FOR DAM SAFETY

Clearly, dam owners must bear responsibility for any unlawful harm which is caused by a dam. The law concerning civil liability is principally found in the law of negligence, which in relation to personal injury, is now gathered into the Civil Liability Act 2002. The principles of nuisance and trespass might also need to be considered.

Satisfaction of DSC requirements should not be seen as meeting the legal responsibility which lies upon a dam owner. The extent of responsibility at law to other persons is not defined by DSC requirements.

In outline, a dam owner will need to consider the level of risk posed by the dam. Where there is a possibility of risk to life then, naturally, the law requires a much higher degree of care. The greater the potential degree of harm, the greater the level of care required. This will be judged by the standard expected of a reasonable dam owner in the circumstances.

The former rule, known as the rule in *Rylands v Fletcher*, which imposed a "strict" liability upon a dam owner has been cast aside in Australia by the High Court and the ordinary principles of the law of negligence apply to dam ownership/management. However, as the potential harm posed by dams can be very great, the level of care expected can be similarly high.

The high standard of care required must be applied to the design, construction and operation of a dam. The standards of care which apply change as engineering standards and practices change and dam owners must display a dynamic responsiveness to such changes. A failure to keep "up to date" may be a breach of the duty of care.

The following sub-sections contain some more detail of common law principles.

### 3.1 Negligence

A dam owner is potentially liable to anyone who is owed a duty of care. A breach of that duty of care may constitute negligence. In broad terms, a duty of care usually exists where a risk of affecting another person was foreseeable.

Some of the responsibilities upon a dam owner/manager when discharging this duty of care are listed as follows:

- Competent designers and construction contractors must be used by a dam owner. A principal may be liable if a dam is designed, or constructed, by contractors who were not suitable or competent to do the work, and damage is suffered by a third party as a consequence.
- Operators of dams must be suitably well trained, reflecting the potential hazard posed by the dam.
- Due to the potentially serious consequences of a dam failure, the level of care required of dam owners is very high. The level of hazard affects the level of care required (e.g. Extreme Consequence Category dams, like Warragamba Dam, need to be designed to cope with an extreme flood while a small rural dam requires a lower standard of care in relation to design and construction).
- An effective dam safety management program, with an appropriate surveillance system, must be established to maintain the dam in a safe state, while having the ability to detect and mitigate any potential dangers.

### 3.2 Nuisance

Two types of nuisance are recognised in law:

- **Private** involves an invasion of the use and enjoyment by a person of his land. Periodic inundation due to the operation of a storage could constitute a private nuisance; and
- **Public** involves a person who suffers loss due to invasion of rights not necessarily being rights in land. The issues involved are very similar to those in negligence.

Both types of nuisance exist as potential problems for dam owners.

### 3.3 Trespass

This involves deliberate “entry” onto someone’s property without permission. A property owner whose property suffers flooding due to deliberate action may be able to claim there has been a trespass and seek compensation. (Statutory authority may exist in relation to flooding by public authority action to avoid liability for trespass).

## 4. OWNERS RESPONSIBILITY FOR DAM OPERATION, MAINTENANCE & SURVEILLANCE

As a consequence of:

- the potential for legal liability for any dam failure; and
- the requirements specified by the DSC

dam owners are obliged to develop and conduct appropriate dam safety management programs, including operations, maintenance, and surveillance activities to mitigate their liabilities (see DSC1A and the DSC2 range of guidance sheets for details). Appropriate monitoring equipment must also be installed and maintained.

Qualified personnel must be responsible for the operation, maintenance and surveillance programs. Dam owners must ensure adequate staff numbers and availability since safe dam operation, maintenance and surveillance are dependent upon staff to carry them out. There must also be adequate systems for training and directing staff.

## 5. GOVERNMENT BODIES INVOLVED IN DAM SAFETY

### 5.1 Dams Safety Committee (DSC)

This DSC is constituted under the *Dams Safety Act, 1978*. The DSC may prescribe a dam pursuant to the Act, whereupon the DSC is entitled to exercise certain powers. The DSC is concerned with safeguarding the community and the environment in relation to dam integrity and operation to the extent that operation affects the safety of the dam itself. In particular, the DSC has the functions set out in Section 14 of the Act which include:

- prescribing dams;
- maintaining surveillance of prescribed dams, the environs under, over and surrounding prescribed dams and the waters or other materials impounded in order to ensure safety;
- examining and investigating the location, design, construction, reconstruction, extension, modification, operation and maintenance of prescribed dams; and
- obtaining information and making reports.

In addition, the DSC has express powers (including penalty provisions) to:

- enter property;
- require work to be done;
- conduct enquiries; and
- take control of a dam in a state of emergency involving dam failure or potential failure.

The Act does not limit the interest of the DSC to large structures and the DSC may therefore exercise powers even in relation to small dams. However, small dams are unlikely to attract the concern of the DSC if they are used for domestic, or ordinary rural, purposes, and do not pose a serious hazard.

Use of a dam for storage of toxic waste, or in some otherwise potentially dangerous manner, may attract the DSC's concern and the dam may be prescribed. This applies in particular to tailing dams which store potentially hazardous materials. The DSC has a significant concern for the protection of the environment as well as life and property.

Apart from meeting the requirements of the DSC, there are other statutes that may impose requirements on a dam owner. It is the responsibility of dam owners to ensure that all statutory requirements are met. Advice by the DSC that a dam meets its requirements is not to be interpreted as meaning that all other statutory requirements are met.

Dam owners should be aware of the following Government bodies who administer statutes which could influence the design or operation of a dam or its ancillary works. It is possible that one or more of these bodies could require a higher design or operating standard than is necessary for purposes of the DSC.

## 5.2 Department of Water and Energy (DWE)

The Crown is effectively, the "owner" of naturally occurring water in rivers, lakes and dams in NSW because the right to the control, use and flow of water is vested in the Crown. The management of this natural resource is performed by the Minister for Water through the DWE.

The DWE will require that a licence pursuant to Part 2 of the *Water Act, 1912* or a Works Approval under the *Water Management Act 2000*, (with a few exceptions for smaller dams) be obtained prior to constructing a dam. Licence conditions can impose requirements on the design or operation of dams. A dam proposed to be built on a declared floodplain under Part VIII of the *Water Act* may require an approval under that Part. Failure to obtain the necessary licences or approvals could lead to an order to remove the structure and/or prosecution for an offence with the imposition of a fine.

DWE also has a role in approving funds for local government dam construction under State and Federal Water Resources Assistance Programs and acts as the approval authority for the safety of Local Government dams under the relevant provisions of the *Local Government Act 1993*.

## 5.3 Department of Environment and Climate Change (DECC)

The DECC administers the Protection of the Environment Operation Act 1997 which prohibits the pollution of waters except in accordance with a licence. Dams can have the potential to pollute water through activities such as:

- their failure; and
- the discharge through spillways, or outlet works, or seepage, of water which differs in quality (including temperature) from the receiving waters.

A proposal for a dam which will retain potentially polluting substances (e.g. tailings dams) will have to be referred to the DECC which may require that a licence to discharge be obtained. Such approval may be subject to certain conditions being complied with, including monitoring equipment.

Failure to comply with the Protection of the *Environment Operation Act 1997* could result in prosecution and imposition of a fine.

#### 5.4 Department of Planning

**T**he *Environmental Planning and Assessment Act 1979 (EP&A Act)* is administered by the Department of Planning. That Department will require Ministerial approval of a dam (or mining operation near a dam) as a major project under Part 3A or development consent from a consent authority or approval of a determining authority under Parts IV or V respectively of the EP&A Act before dam construction or modification is commenced. The environmental assessment of the project under either process may lead to some design modifications in addition to DSC requirements.

#### 5.5 Local Government

**L**ocal Government Authorities will generally have planning powers in relation to a dam construction proposed of a private character. Accordingly, enquiry must be made of environmental planning instruments as to whether dam construction is permitted with, or without, development approval (see Part IV of the *EP&A Act*). (If a Local Government Authority does not have an approval role there may be a requirement to obtain Minister of Planning approval under Part 3A of the *EPA Act* or an approval from a determining authority under Part 5 of that Act. The dam is also likely to be “designated development”, unless only a small farm dam).

#### 5.6 Department of Primary Industries (DPI)

**D**ue to the danger of leakage from a dam into mines, enquiry should be made to the DPI in relation to location of mines in relation to a proposed dam.

The Minister administering the *Mining Act 1992* (with DSC advice) may permit mining to be undertaken near, or beneath, any prescribed dam.

## 6. RESPONSIBILITIES FOR EMERGENCY MANAGEMENT OF DAMS

**W**here a prescribed dam has failed, or is liable to fail, a state of emergency can be declared under the *Dams Safety Act* (section 21). The DSC may thereupon take control of the dam or take other measures as detailed in the Act.

There are also provisions under the *Local Government Act 1993* which give the Minister, administering that Act, the power to take action in the case of emergencies related to unsafe council dams. In addition, there are the extensive statutory powers of the State Emergency Service (SES) in relation to emergencies and the planning to provide protection for communities from a range of flood events, including dambreak.

Where persons may be at risk in the event of dam failure, the DSC requires owners of dams to identify conditions which could lead to dam failure, or damaging releases of stored waters, and for dam safety emergency planning to occur.

Two types of emergency plans might be required as follows:

- A Dam Safety Emergency Plan (DSEP) developed by the dam owner. The plan should list actions for the owner's personnel to take if an incident or emergency develops. Each plan must be site-specific with careful research and co-ordinated planning of all involved parties to lay the foundation for a responsible, and thorough, DSEP. In addition, failure to establish an appropriate plan may be regarded as negligence by the dam owner; and
- A separate Flood Plan, developed by the SES, in consultation with the dam owner and relevant authorities, to provide protection for downstream communities in the event of a dam safety emergency.

There is a particular need for these actions where a dam is known to have some deficiency.

Relevant guidelines on dam safety emergency planning are given in Chapter 8 of the Australian National Committee on Large Dam's *Guidelines on Dam Safety Management - 2003*, whilst the DSC's particular requirements are set out in its Guidance Sheet on *Emergency Management for Dams - DSC2G*.

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/>


For any further information please contact:

**NSW Dams Safety Committee**

Level 3, Macquarie Tower  
10 Valentine Avenue, Parramatta NSW 2150

 PO Box 3720, Parramatta NSW 2124

 (02) 9842 8073       (02) 9842 8071

 [dsc@damsafety.nsw.gov.au](mailto:dsc@damsafety.nsw.gov.au)



ISSN 1039-821X