

1 Introduction

There is community concern regarding the potential for medium to large dams, including ring tanks and some weirs, to fail and threaten lives. In the past dam safety has been regulated by the *Water Resources Act 1989*, with safety requirements incorporated into the conditions of waterworks licences issued under that Act.

New legislation, the *Water Act 2000*, which supersedes provisions of the *Water Resources Act 1989*, received assent on 13 September 2000. The dam safety provisions of the *Water Act* commenced on 19 April, 2002.

This new legislation changes the way in which referable dams are defined and regulated. Dam owners need to check whether their dam is subject to this legislation. The *Water Act 2000* requires owners of particular dams to assess the impacts of dam failure on the safety of people living downstream of the dam, by way of a 'dam failure impact assessment', to determine whether the dam is a referable dam. The new legislation also provides for regular ongoing assessment of the potential threat to people from unexpected flooding caused by a failure of one of these dams.

1.1 Dam Safety

Under the *Water Act 2000*, the chief executive of the Department of Natural Resources and Mines (NR&M) is responsible for the regulation of referable dams in Queensland.

The chief executive becomes involved in the assessment of applications for development permits that seek approvals to:

- build new referable dams or
- carry out works on existing referable dams that will increase the storage capacity of those dams by more than 10%.

The chief executive has the power under the *Integrated Planning Act 1997* to impose conditions relating to dam safety on development permits which approve the above dams and works. The development permits attach to the land where the referable dam is located and bind the owner, the owner's successors in title (ie future purchasers) and any occupier of the land.

The chief executive also has the power under the *Water Act 2000* to impose safety conditions on referable dams that have already been constructed. The chief executive can modify these conditions if the chief executive believes that the changes are in the interests of dam safety. Safety conditions are taken to form part of a development permit for the dam and can be imposed regardless of whether the dam owner already has a development permit for the dam. They attach to the land where the dam is located and bind the owner, the owner's successors in title (ie future purchasers) and any occupier of the land.

The chief executive can also give directions to take stated action to an owner or operator of a referable dam by issuing a written notice. Such a notice will only be issued if:

- there is a danger of the dam failing and
- action is necessary to prevent or minimise the impact of the failure.

These notices also attach to the land where the referable dam is located, binding the owner of the land at the time it is issued and any future owners.

1.2 Guidelines - Aims

The *'Guidelines for Failure Impact Assessment of Water Dams'* and *'Queensland Dam Safety Management Guidelines for Referable Dams'* have been developed to help owners comply with the *Water Act 2000* and dam safety conditions for referable dams (these include both conditions relating to dam safety imposed on development permits and safety conditions imposed under the *Water Act 2000*).

The *Guidelines for Failure Impact Assessment of Water Dams* provide information about:

- referable dams
- failure impact ratings
- dam failure impact assessment and how it is done
- certification of a dam failure impact assessment
- lodging a dam failure impact assessment for an existing dam
- lodging a dam failure impact assessment for a new or proposed dam
- lodging a dam failure impact assessment for works on an existing dam
- timing requirements for undertaking dam failure impact assessments
- processes for accepting, rejecting or reviewing a dam failure impact assessment
- responsibilities, penalties and provisions for appeals

More information on changes to the legislation and dam safety generally can be found in the *Queensland Dam Safety Management Guidelines*.

For further information on this guideline or the information outlined above, please contact:

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