



Dams Safety Regulation 2019

Proposed Amendments

Introduction – Peter Boyd, Manager Governance & Assurance

August 2021

Dams Safety Regulation 2019 history

Date	Description
November 2019	Regulation commenced
April 2020	First amendment (minor changes)
August 2021	Proposed amendment (current consultation)

Declared dams

Dams Safety NSW 'declares' those dams which have a potential to:

- threaten downstream life
- cause major infrastructure, environmental, health or social damage.

Declared dams

There are **403** declared dams in NSW

Dam Consequence Category	Potential Loss of Life (PLL, approx)	Number of dams
Extreme	>50	31
High A	5 - 50	52
High B	1 - 5	30
High C		106
Significant & Low	<1	184

Proposed regulation amendments

Dams Safety NSW is proposing amendments to the Dams Safety Regulation 2019

- some are applicable to all dams
- some are only applicable to Extreme and High consequence category dams.

Proposed amendments – applicable to all dams

Proposed regulation amendments – all dams

- Contact person for Dams Safety NSW (*new*)
- Accountable individual for the dam safety management system (*new*)
- Competent person for risk rating calculations (*new*)
- ‘Major augmentation’ not ‘major change’ to trigger the tighter safety threshold requirement (*change*)
- Adding ‘environment’ to the Dam Safety Management System aims (*new – currently ‘the safety of persons and property’*).

Nomination of a contact person for Dams Safety NSW

Current requirement in <i>the Dams Safety Regulation 2019</i>	Proposed changes to the regulation
<p>No current requirement – this is a new proposal</p>	<p>It is proposed that a declared dam owner must provide Dams Safety NSW with the name and contact details of a contact person.</p> <p>It is proposed that the nominated person:</p> <ul style="list-style-type: none">• must be part of the dam owner’s organisation (whether a director, manager or other employee)• reasonably available to be contacted by Dams Safety NSW for the purposes of Dams Safety NSW exercising its functions in relation to the dam and• may be nominated in respect of one or more dams. <p>The owner of a declared dam must give Dams Safety NSW the name and contact details of the contact person for the dam within 14 days after the person is nominated.</p>

Nomination of an accountable individual for the dam safety management system

Current requirement in <i>the Dams Safety Regulation 2019</i>	Proposed changes to the regulation
<p data-bbox="173 411 817 454">Dam Safety Management System</p> <p data-bbox="173 511 825 554">Clause 14 of the regulation states:</p> <p data-bbox="173 611 907 805"><i>(1) The owner of a declared dam must establish and implement a dam safety management system for the dam in accordance with this Part.</i></p> <p data-bbox="173 968 907 1216">There is currently no requirement for a declared dam owner to nominate an individual who is responsible for ensuring compliance with the dam safety management system</p>	<p data-bbox="937 411 1294 454">It is proposed that:</p> <p data-bbox="937 511 2384 654">the dam safety management system document specifies an individual who is responsible for ensuring compliance with the dam safety management system.</p> <p data-bbox="937 716 1217 759">The individual:</p> <ul data-bbox="937 816 2395 1011" style="list-style-type: none"><li data-bbox="937 816 2395 911">a. must be authorised by the declared dam owner to do all things necessary to ensure compliance with the dam safety management system and<li data-bbox="937 968 1793 1011">b. may be nominated for one or more dams. <p data-bbox="937 1073 2384 1216">The dam safety management system document for a dam must be updated within 14 days after a change in the name or contact details of the individual. The dam owner may be the nominated individual.</p>

Competent person for risk rating calculations

Current requirement in <i>the Dams Safety Regulation 2019</i>	Proposed changes to the regulation
<p>Clause 15 of the regulation states:</p> <p><i>Assessment of societal and individual risk rating</i></p> <p><i>(1) The owner of a declared dam (other than a proposed dam) must use the risk management framework under clause 14 to produce a written report on all foreseeable risks to the dam -</i></p> <p>...</p> <p><i>(2) The owner of a declared dam that is a proposed dam must use the risk management framework under clause 14 to produce a written report on all foreseeable risks to the dam at the time that the dam is being designed</i></p> <p>There is currently no requirement for the societal risk rating to be carried out by a competent person and no requirement for the societal risk rating calculation to be reviewed by an independent competent person</p>	<p>It is proposed that the calculation for the assessment of the risk rating of a dam be carried out by a competent person.</p>

Clarification that the lower safety threshold applies to a major augmentation to the dam

Current requirement in <i>the Dams Safety Regulation 2019</i>	Proposed changes to the regulation
<p>Clause 15 (4) of the regulation states:</p> <p><i>If the societal risk rating or highest individual risk rating for a dam is higher than the following (the safety threshold), the dam owner must forward a copy of the report to Dams Safety NSW as soon as practicable after the report is produced –</i></p> <p><i>(a) societal risk rating for an existing dam (except as provided by paragraph (b))—0.001,</i></p> <p><i>(b) societal risk rating for a proposed dam or for an existing dam that is to be subject to a major change - 0.0001,</i></p>	<p>It is proposed that the regulation be amended to replace ‘major change’ with ‘major augmentation’ as follows:</p> <p><i>(b) societal risk rating for a proposed dam or for an existing dam that is to be subject to a major augmentation - 0.0001,</i></p>

Augmentation means a modification to a declared dam that is made to extend the function of the dam.

The augmentation to the dam usually creates a significant new benefit. Some examples include a permanent raising of the operating storage level of the dam; changing the dam/spillway configuration to cater for a new purpose such as flood mitigation.

Correction to the goals of the dam safety management system

Current requirement in <i>the Dams Safety Regulation 2019</i>	Proposed changes to the regulation
<p data-bbox="165 445 802 488">Dam Safety Management System</p> <p data-bbox="165 545 879 588">Clause 12 (2) of the regulation states:</p> <p data-bbox="165 702 1159 945"><i>The dam safety management system must be designed to be used by the owner of the dam as the primary means of ensuring, so far as is reasonably practicable, the safety of persons and property is not put at risk from the dam.</i></p> <p data-bbox="165 1159 1184 1245">The word 'environment' was inadvertently omitted from this clause of the regulation.</p>	<p data-bbox="1243 445 2305 488">It is proposed that the regulation be amended as follows:</p> <p data-bbox="1243 702 2407 945"><i>The dam safety management system must be designed to be used by the owner of the dam as the primary means of ensuring, so far as is reasonably practicable, the safety of persons, property and the environment is not put at risk from the dam.</i></p>

**Proposed amendments –
Extreme and High consequence category
dams only**

Declared dams

Dam Consequence Category	Potential Loss of Life (PLL, approx)	Number of dams
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High and extreme consequence category dams

- Independent competent person for review of risk calculations (*new*)
- Competent panel for:
 - safety reviews and
 - for review of safety reviews (*was competent person*)
- Competent panel for design checks (*was competent person*)

Competent person for review of risk rating calculations

Current requirement in <i>the Dams Safety Regulation 2019</i>	Proposed changes to the regulation
<p>Clause 15 of the regulation states:</p> <p><i>Assessment of societal and individual risk rating</i></p> <p>(1) <i>The owner of a declared dam (other than a proposed dam) must use the risk management framework under clause 14 to produce a written report on all foreseeable risks to the dam—</i></p> <p>...</p> <p>(2) <i>The owner of a declared dam that is a proposed dam must use the risk management framework under clause 14 to produce a written report on all foreseeable risks to the dam at the time that the dam is being designed</i></p> <p>There is currently no requirement for the societal risk rating calculation to be reviewed by an independent competent person.</p>	<p>It is proposed that the calculation for the assessment of the risk rating of a dam be carried out by a competent person.</p> <p>It is proposed that the calculation for the assessment of the risk rating of a dam be reviewed by an independent competent person.</p>

Competent panel for safety reviews and for review of safety reviews

Current requirement in <i>the Dams Safety Regulation 2019</i>	Proposed changes to the regulation
<p>Clause 20 (1) of the regulation states:</p> <p><i>The owner of a declared dam must ensure that a safety review to assess the overall safety of the dam is undertaken by a competent person.</i></p> <p>and sub-clause 20 (6) states:</p> <p><i>(6) A safety review of a dam in any of the following consequence categories must be independently reviewed by a competent person who has not been involved in the safety review process-</i></p> <ul style="list-style-type: none"><i>(a) extreme consequence,</i><i>(b) high A consequence,</i><i>(c) high B consequence,</i><i>(d) high C consequence.</i> <p>There is no requirement for more than one competent person to carry out the safety review to ensure coverage of all the relevant specialties and similarly for the independent review of the safety review.</p>	<p>It is proposed that the safety review must involve a panel of not less than three competent persons, rather than an individual competent person, as is currently required.</p> <p>In addition, it is proposed that the review of the safety review be conducted by an independent panel of not less than three competent persons.</p> <p>The panel must, collectively, have persons with experience, training or professional qualifications in relation to each of the relevant specialties in relation to the dam.</p>

Competent panel for design reviews

Current requirement in <i>the Dams Safety Regulation 2019</i>	Proposed changes to the regulation
<p>Clause 24 of the regulation states:</p> <p><i>The owner of a declared dam that is classified as being in any of the following categories must ensure that work involving designing the dam (or any major modification to the dam) is reviewed by a competent person who has not been involved in the work and is independent of any person who has carried out the work-</i></p> <ul style="list-style-type: none"><i>(a) extreme consequence,</i><i>(b) high A consequence,</i><i>(c) high B consequence,</i><i>(d) high C consequence.</i> <p>There is no current requirement for the competent person carrying out a design review to have all the required competencies for the review.</p>	<p>It is proposed that the review of the design must involve a panel of not less than three competent persons, rather than an individual competent person as is currently required.</p> <p>The panel must, collectively, have persons with experience, training or professional qualifications in relation to each of the relevant specialties in relation to the dam.</p>



For information:

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