
Annual Safety Standards Report

Dams Safety NSW

Liddell Cooling Water Dam - 176

Gardiners Creek near Muswellbrook

Date of report: 29/01/2024

Introduction

The Annual Dams Safety Standards Report demonstrates the declared dam owner's compliance with the dam safety standards set out in the Dams Safety Regulation 2019 (the Regulation).

Every year, declared dam owners must lodge a separate report for each of their declared dams with Dams Safety NSW by 31 March.

The report covers the period 1 January to 31 December of the previous calendar year.

Section 1 - Declared dam identification details

Question	Answer
Dam name	Liddell Cooling Water Dam
Dam location	Gardiners Creek near Muswellbrook
Type of dam	Earthfill
Main purpose of dam	Water Supply
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	AGL Macquarie Pty Ltd
ACN number	167859494

Section 2 - Dams safety standards

Consequence category of dam - Regulation, Part 3

The dam consequence category is a rating of potential impacts resulting from a dam failure. It must be assessed:

- within 6 months of the dam being declared
- at least once every 15 years
- after any significant change in the number of people likely to be affected by a dam failure
- or if required by Dams Safety NSW. [Regulation, subclause 7 \(2\)](#).

Question	Answer
Dam consequence category	High A
Has an independent review been done?	Yes
Name of independent reviewer	Dr Rainer Berg Senior Technical Director: Hydrology, Storm water and Flooding GHD
Why has no independent review been done?	
Do you know the date of the last consequence category assessment by a competent person? Regulation, subclause 3 (1)	Yes
Date of the last consequence category assessment	01/07/2021
Date of next planned consequence category assessment	23/07/2036
Has the number of people likely to be affected by a dam failure changed since the last consequence category review?	No

Section 2 continued - Dams safety standards

How was this checked?

Dam owner local knowledge

Other

Documenting the dam safety management system

Question	Answer
Is the dam safety management system fully documented?	Yes
If no, what percentage of the dam safety management system documentation is complete?	
How did you confirm this percentage?	
Does the dam safety management system apply to more than one dam?	Yes

Implementing the dam safety management system

Question	Answer
Is the dam safety management system fully implemented at this dam?	Yes
If no, what percentage of the dam safety management system is implemented?	
How did you confirm this percentage?	

Section 2 continued - Dams safety standards

Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	7/08/2023

Assessment of societal and individual risk rating

The owner of a declared dam (other than a proposed dam) must use the risk management framework, [Regulation Part 5, clause 14](#) to produce a written report on all foreseeable risks to the dam:

- at least once every 5 years
- when a major change to the dam is proposed, and
- after any significant change in the number of people likely to be affected by a dam failure
- when required by Dams Safety NSW. [Regulation, clause 15.](#)

Question	Answer
Is your dam above the safety threshold?	No
Do you know the date of your last risk report?	Yes
Date of last risk report	02/11/2021
Individual risk rating of the dam	4.97E-6
Societal risk rating of the dam	3.32E-4
Date of next planned risk report	09/11/2026

Section 2 continued - Dams safety standards

Name of competent person and their organisation who signed off the risk report (if risk report recommenced after 1 July 2022)

Name of independent competent person and their organisation who reviewed the report (if risk report commenced after 1 July 2022 - for an extreme, high A or high B consequence dam)

Other safety requirements - Regulation, Part 6

The declared dam owner must report incidents that happen at or in relation to the dam to Dams Safety NSW. [Regulation, clause 19](#)

Question	Answer
Have you had any reportable incidents during the last calendar year?	No
How many incidents?	
Topic/subject of the incident(s)	

Section 2 continued - Dams safety standards

Safety review

The declared dam owner must ensure that a safety review to assess the overall safety of the dam is undertaken by:

- for an extreme or high consequence dam, other than a high C consequence dam—a team of at least 2 competent persons, or
- otherwise—a competent person

The declared dam owner must ensure that a safety review is carried out at least once every 15 years, and as soon as practicable after:

- a deficiency or weakness in the dam is identified
- there is a change in the accepted technology or methods used in one of the relevant specialties or design criteria for dams
- the dam consequence category changes, or
- it is required by Dams Safety NSW. [Regulation, clause 20](#)

Question	Answer
Date of the last safety review Regulation, subclause 20(2) .	09/11/2021
Planned date for next safety review	09/11/2036

For extreme and high consequence dams only

If the dam's consequence category is extreme, high A or high B, the safety review must be reviewed by a panel of at least 2 independent competent persons. [Regulation, subclause 20\(6\)](#).

Question	Answer
If Safety Review commenced after 1 July 2022 - names of independent competent reviewers and their organisation	

Section 2 continued - Dams safety standards

If the dam's consequence category is high C, the safety review must be reviewed by an independent competent person. [Regulation, subclause 20\(6A\)](#).

Question	Answer
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Name of independent competent reviewed and their organisation

Notification of significant changes to the dam

Before making any significant change to the configuration of the declared dam that may affect the safety of the dam, the dam owner must inform Dams Safety NSW of the proposed change in writing. [Regulation, clause 21](#)

Question	Answer
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Has any significant change to the configuration of the dam been made during this calendar year?

No

Describe the change

Is any significant change to the configuration of the dam planned?

No

Describe the change and when is it planned?

Other

Date

Section 2 continued - Dams safety standards

Emergency exercises

The declared dam owner must ensure that staff who are involved in the operation of the dam undertake emergency exercises at least once every 3 years. [Regulation, clause 22](#)

Question	Answer
Have you done a 'theoretical classroom' emergency exercise?	Yes
Date of last 'theoretical classroom' emergency exercise Regulation, subclause 22(1) .	03/11/2021
Planned date for next 'theoretical classroom' emergency exercise	30/11/2024

For extreme or high consequence dams only

The declared dam owner must ensure that staff who are involved in operating the dam undertake practical emergency exercises at least once every 5 years, where possible including relevant agencies identified in the emergency plan. [Regulation, subclauses 22 \(3\) and 22 \(4\)](#).

Question	Answer
Have you done a practical emergency exercise?	Yes
Date of last practical emergency exercise	30/11/2021
Planned date for next practical emergency exercise	30/11/2026

Section 2 continued - Dams safety standards

Design and construction

Dam safety management system for design and construction

Question

Answer

Does the dam safety management system cover dam design and construction? [Regulation, Clause 12\(3\)](#)

Was the risk management framework used or is it currently being used to prepare a risk report at the dam design stage? [Regulation, clause 15\(2\)](#)

Certain work must be carried out by a person subject to a quality management system. [Regulation, subclause 23\(1\)](#)

Question

Answer

Have you ensured that design and construction are carried out by a person subject to an AS ISO 9001:2016 quality management system? Yes

Independent competent persons must review work involving dam design. [Regulation, clause 24](#)

Question

Answer

For Extreme and High consequence category dams, provide the name of the independent person(s) and their organisation who reviewed or are reviewing the design [Regulation, clause 24](#)

For dams still in an early design phase, have you planned an independent competent person design review?

Section 3 - Additional information for Dams Safety NSW

Question	Answer
Date of last Emergency Plan review	22/12/2023
Date of last Operations and Maintenance Plan review	22/12/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.agl.com.au/about-agl/how-we-source-energy/agl-macquarie/documents


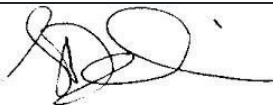
Section 4 - Attestation

The Attestation of the information provided in the form must be completed by the dam owner office holder(s):

Dam owner	Attesting office holder(s)
Company	<ul style="list-style-type: none"> • 2 directors, or • 1 director and 1 company secretary • The combined director and company secretary (where there is only 1 director)
Statutory state-owned corporation	Chief Executive Officer or Managing Director responsible for managing the operation of the statutory state-owned corporation in accordance with the general policies and specific directions of the board
Statutory corporation	Corporation with 2 or more members: <ul style="list-style-type: none"> • President, chairperson or another principal officer of the corporation • Sole corporation • The person who constituted the constitution • The person managing the affairs of the corporation
Government department	Secretary
Individual	Individual

Section 4 - Attestation continued

Declared dam owner office holder(s) attesting to the accuracy of this report

Melinda Hunter	
Director	
	
Suzanna Dabski	
Company Secretary	
	

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