Annual Safety Standards Report

Dams Safety NSW

South Cessnock Dam - 1360

Unnamed tributary of Black Creek, South Cessnock

Date of report: 21/03/2024



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	South Cessnock Dam
Dam location	Unnamed tributary of Black Creek, South Cessnock
Type of dam	Embankment
Main purpose of dam	Flood Control
Other	
Is the dam built on a river, stream or watercourse?	No
Name of dam owner	Cessnock City Council
ACN number	



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	Significant
Has an independent review been done?	Yes
Name of independent reviewer	Klay Chan NSW Public Works (was not engaged to review the final 04/05/2022 report)
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	04/05/2022
Date of next planned consequence category assessment	04/05/2037
Has the number of people likely to be affected by a dam failure changed since the last consequence category review?	No



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?	No
If no, what percentage of the dam safety management system documentation is complete?	0-25%
How did you confirm this percentage?	Draft in review - in process of adding into existing DSMSD for Council's other declared dam
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?	No
If no, what percentage of the dam safety management system is implemented?	0-25%
How did you confirm this percentage?	Key staff statements - see above response



Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	29/11/2023

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 forseeable 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	04/05/2022
Individual risk rating of the dam	1.72E-8
Societal risk rating of the dam	2.31E-6
Date of next planned risk report	04/05/2027



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

Ben Patterson | RHDHV

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

Klay Chan | NSW Public Works (was not engaged to review the final 04/05/2022 report)

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)	



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)	
Planned date for next safety review	04/05/2027 to incorporate WAE information. Construction completion anticipated to be Feb 2025

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	NA



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
Name of independent competent reviewed and their organisation	NA

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



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?	No
Date of last 'theoretical classroom' emergency exercise <u>Regulation</u> , <u>subclause 22(1)</u>	
Planned date for next 'theoretical classroom' emergency exercise	Will be carried out after construction completion

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. <u>Regulation</u>, <u>subclauses 22 (3) and 22 (4)</u>

Question	Answer
Have you done a practical emergency exercise?	
Date of last practical emergency exercise	
Planned date for next practical emergency exercise	



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)	Yes but currently only for Council's other declared dam.
	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)	Yes, same DSMSD framework used although it is for Council's other declared dam.

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

Question	Answer
Question	Allower

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

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	Klay Chan NSW Public Works (was not engaged to review the final 'For Tender' detailed design documentation)
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	NA - to be compiled after construction completion
Date of last Operations and Maintenance Plan review	NA - to be compiled after construction completion
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.cessnock.nsw.gov.au/Environment/Flooding

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	 2 directors, or 1 director and 1 company secretary The combined director and company secreatary (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: 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

Name of declared dam owner office holder attesting to the accuracy of this report	Ken Liddell
Position of declared dam owner office holder attesting to the accuracy of this report	General Manager
Signature	f ff.
Name of declared dam owner office holder attesting to the accuracy of this report	,
Position of declared dam owner office holder attesting to the accuracy of this report	
Signature	

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