

27 March 2024

Mr Chris Salkovic

Chief Executive Officer

Dams Safety NSW 4 Parramatta Square 12 Darcy Street Parramatta NSW 2150

By email: info@damsafety.nsw.gov.au

Dear Chris,

### RE: Snowy Hydro Submission of Annual Safety Standards Reports and Attestation Statement to 31 December 2023

Snowy Hydro Limited (Snowy Hydro) is the dam owner of the following 16 declared clams.

Declared Dams			
1.	Deep Creek Dam	9.	Khancoban Dam
2.	Eucumbene Dam	10.	Murray 2 Dam
3.	Eucumbene Saddle Dam	11.	Talbingo Dam
4.	Geehi Dam	12.	Tantangara Dam
5.	Guthega Dam	13.	Tooma Dam
6.	Island Bend Dam	14.	Tumut Pond Dam
7.	Jindabyne Dam	15.	Tumut 2 Dam
8.	Jounama Dam	16.	Tumut 3 Inlet Structure

Pursuant to the *Dams Safety Act 2015 (NSW)*, Snowy Hydro is required to submit an Annual Dam Safety Standards Report for each of the dams listed above to demonstrate Snowy Hydro's compliance with the dam safety standards for the calendar year ending 31 December 2023 by 31 March 2024.



#### Please find attached:

- 1. Attestation by Snowy Hydro's Managing Director and Company Secretary attesting to the accuracy of Snowy Hydro's annual dam safety reports; and
- 2. Snowy Hydro's annual dam safety reports (in the form required by Dam Safety NSW) for all 16 declared dams.

Snowy Hydro will make the reports available at our main office and on our website.

Should you require further information, please contact Michael Thornton, Dam Safety Manager on 0427 285 125.

Yours sincerely,

Docusigned by:

Punis Barnes
F28DC40681E041A...

**Dennis Barnes** 

**Managing Director and Chief Executive Officer** 

**Snowy Hydro Limited** 



#### **Statement of Attestation**

As the office holders of the dam owner, we attest to the accuracy of the Annual Dam Safety Standard Reports provided by Snowy Hydro for the calendar year ending 31 December 2023 for the dams listed below.

Declared Dams			
1.	Deep Creek Dam	9.	Khancoban Dam
2.	Eucumbene Dam	10.	Murray 2 Dam
3.	Eucumbene Saddle Dam	11.	Talbingo Dam
4.	Geehi Dam	12.	Tantangara Dam
5.	Guthega Dam	13.	Tooma Dam
6.	Island Bend Dam	14.	Tumut Pond Dam
7.	Jindabyne Dam	15.	Tumut 2 Dam
8.	Jounama Dam	16.	Tumut 3 Inlet Structure

Name and signature of declared dam owner office holder attesting to the accuracy of this report	Docusigned by: Dunis Barnes  Dennis Barnes
Position of the declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Name and signature of declared dam owner office holder attesting to the accuracy of this report	Docusigned by:  Sugarnah Hetcher  125680CA68C6422  Suzannah Fletcher
Position of the declared dam owner office holder attesting to the accuracy of this report	Company Secretary

### **Annual Safety Standards Report**

**Dams Safety NSW** 

# Deep Creek Snowy Dam - 796

Deep Creek, Khancoban

Date of report: 26/03/2024



#### 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	Deep Creek Snowy Dam
Dam location	Deep Creek, Khancoban
Type of dam	Concrete gravity
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



#### **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	Low
Has an independent review been done?	Yes
Name of independent reviewer	
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	30/11/2023
Date of next planned consequence category assessment	30/11/2038
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?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

#### 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	21/12/2023
Individual risk rating of the dam	2.8x10-6
Societal risk rating of the dam	3.0x10-6
Date of next planned risk report	21/12/2028



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

Peter Hill (Director and Principal Hydrologist, HARC)

Name of independent competent person and their organisation who Dr Mark Foster (Dams

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

Dr Mark Foster (Dams Engineer, Dam Consulting Services Pty Ltd)

#### 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 <b>Regulation</b> , subclause 20(2)	11/12/2023
Planned date for next safety review	11/12/2038

#### 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

Question	Answer
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	



#### **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 <u>Regulation</u> , <u>subclause 22(1)</u>	05/11/2022
Planned date for next 'theoretical classroom' emergency exercise	22/11/2025

#### 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? <u>Regulation</u>, 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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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 26/09/2023 Plan review	
Date of last Operations and 26/09/2023 Maintenance Plan review	
Is last year's Annual Dams Safety Standards Report published on your website?	
Provide the link to the report https://www.snowyhydro.com.au/wp-content/uploads/2024/01/Deep_Creek_Snowy_Dam_Annual_Safety_Standards	ırds_Rep

#### **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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### **Annual Safety Standards Report**

**Dams Safety NSW** 

# **Eucumbene Dam - 351**

**Eucumbene River, Eucumbene** 

**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	Eucumbene Dam
Dam location	Eucumbene River, Eucumbene
Type of dam	Earthfill
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



#### **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	Extreme
Has an independent review been done?	Yes
Name of independent reviewer	Peter Hill (Principal, HARC)
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	01/08/2019
Date of next planned consequence category assessment	01/08/2024
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?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

#### 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	30/12/2022
Individual risk rating of the dam	2.15x10-7
Societal risk rating of the dam	3.9x10-5
Date of next planned risk report	30/12/2027



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

Hydrologi

Mark Pearse (Principal Hydrologist, HARC)

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

Peter Hill (Principal Hydrologist, HARC)

#### 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 <b>Regulation</b> , subclause 20(2)	07/12/2018
Planned date for next safety review	07/12/2033

#### 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	Graeme Bell (Dam Engineering Consultant, University of NSW or UNSW)



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

Question	Answer
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	



#### **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)	14/12/2023
Planned date for next 'theoretical classroom' emergency exercise	14/12/2026

#### 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?	Yes
Date of last practical emergency exercise	17/02/2022
Planned date for next practical emergency exercise	17/02/2027



#### **Design and construction**

Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, 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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

#### **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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### **Annual Safety Standards Report**

**Dams Safety NSW** 

## **Eucumbene Dam - 351**

**Eucumbene River, Eucumbene** 

Note: This report is for Eucumbene Saddle Dam

**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	Eucumbene Dam
Dam location	Eucumbene River, Eucumbene
Type of dam	Earthfill
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	No
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



#### **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 B
Has an independent review been done?	Yes
Name of independent reviewer	Peter Hill (Principal, HARC)
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	01/08/2019
Date of next planned consequence category assessment	01/08/2024
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?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

#### 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	30/12/2022
Individual risk rating of the dam	2.15x10-7
Societal risk rating of the dam	3.9x10-5
Date of next planned risk report	30/12/2027



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

Hydrologi

Mark Pearse (Principal Hydrologist, HARC)

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

Peter Hill (Principal Hydrologist, HARC)

#### 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 <b>Regulation</b> , subclause 20(2)	07/12/2018
Planned date for next safety review	07/12/2033

#### 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	Graeme Bell (Dam Engineering Consultant, University of NSW or UNSW)



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

Question	Answer
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	



## **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)	14/12/2023
Planned date for next 'theoretical classroom' emergency exercise	14/12/2026

### 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?	Yes
Date of last practical emergency exercise	17/02/2022
Planned date for next practical emergency exercise	17/02/2027



#### **Design and construction**

#### Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, <u>Clause 12(3)</u>

Was the risk management framework used or is it currently being used to prepare a risk report at the dam design stage? <u>Regulation</u>, <u>clause</u> <u>15(2)</u>

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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

## **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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## **Annual Safety Standards Report**

**Dams Safety NSW** 

## Geehi Dam - 777

Geehi River, Kosciusko National Park

**Date of report:** 26/03/2024



#### 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	Geehi Dam
Dam location	Geehi River, Kosciusko National Park
Type of dam	Rockfill
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



## **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 B
Has an independent review been done?	Yes
Name of independent reviewer	Peter Hill (Principal Hydrologist, HARC)
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	01/08/2019
Date of next planned consequence category assessment	01/08/2034
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?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

#### 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	21/12/2023
Individual risk rating of the dam	4.18x10-8
Societal risk rating of the dam	1.52x10-6
Date of next planned risk report	21/12/2028



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

Peter Hill (Director and Principal Hydrologist, HARC)

Name of independent competent person and their organisation who Dr Mark Foster (Dams

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

Dr Mark Foster (Dams Engineer, Dam Consulting Services Pty Ltd)

### 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)	01/11/1987
Planned date for next safety review	30/12/2024

#### 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

Question	Answer
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	



## **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)	28/10/2021
Planned date for next 'theoretical classroom' emergency exercise	28/10/2024

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

Question	Answer
Have you done a practical emergency exercise?	Yes
Date of last practical emergency exercise	02/11/2023
Planned date for next practical emergency exercise	02/11/2028



#### **Design and construction**

Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, 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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

## **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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## **Annual Safety Standards Report**

**Dams Safety NSW** 

## **Guthega Dam - 355**

**Snowy River, Guthega** 

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	Guthega Dam
Dam location	Snowy River, Guthega
Type of dam	Concrete gravity
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



## **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 B
Has an independent review been done?	Yes
Name of independent reviewer	Peter Hill (Principal Hydrologist, HARC)
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	01/08/2019
Date of next planned consequence category assessment	01/08/2024
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?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

#### 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	30/12/2022
Individual risk rating of the dam	1.98x10-6
Societal risk rating of the dam	3.23x10-6
Date of next planned risk report	30/12/2027



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

Hydrologi

Mark Pearse (Principal Hydrologist, HARC)

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

Peter Hill (Principal Hydrologist, HARC)

#### 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

Question

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 <b>Regulation</b> , subclause 20(2)	05/05/2022
Planned date for next safety review	05/05/2037

#### 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)** 

ı	If Safety Review commenced after 1 July 2022 - names of independent competent reviewers and their organisation	Richard Frost (Senior Technical Director, GHD)

**Answer** 



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

Question	Answer
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	



## **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)	14/12/2023
Planned date for next 'theoretical classroom' emergency exercise	14/12/2026

#### 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?	Yes
Date of last practical emergency exercise	17/02/2022
Planned date for next practical emergency exercise	17/02/2027



#### **Design and construction**

Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, 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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

## **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>	
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>	
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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## **Annual Safety Standards Report**

**Dams Safety NSW** 

## **Island Bend Dam - 357**

**Snowy River, Island Bend** 

**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	Island Bend Dam
Dam location	Snowy River, Island Bend
Type of dam	Concrete gravity
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



## **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 C
Has an independent review been done?	Yes
Name of independent reviewer	Peter Hill (Principal, HARC)
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	01/08/2019
Date of next planned consequence category assessment	01/08/2024
Has the number of people likely to be affected by a dam failure changed since the last consequence category review?	No
Name of independent reviewer  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)  Date of the last consequence category assessment  Date of next planned consequence category assessment  Has the number of people likely to be affected by a dam failure changed since the last	Peter Hill (Principal, HARC)  Yes  01/08/2019  01/08/2024



How was this checked?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

#### 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	30/12/2022
Individual risk rating of the dam	3.23x10-7
Societal risk rating of the dam	6.14X10-7
Date of next planned risk report	30/12/2027



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

Mark Pearse (Principal Hydrologist, HARC)

#### 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?	Yes
How many incidents?	2
Topic/subject of the incident(s)	(i) a failure of a control system that had the potential to: (i) endanger the safe operation of the dam, or (ii) endanger the safety of a person, or (iii) cause damage to property or the environment, or (iv) cause an uncontrolled release of the contents of the dam,



#### 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)	11/05/2022
Planned date for next safety review	11/05/2037

#### 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	Richard Frost (Senior Technical Director, GHD)

#### 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
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	



## **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)	14/12/2023
Planned date for next 'theoretical classroom' emergency exercise	14/12/2026

### 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?	Yes
Date of last practical emergency exercise	17/02/2022
Planned date for next practical emergency exercise	17/02/2027



#### **Design and construction**

#### Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, <u>Clause 12(3)</u>

Was the risk management framework used or is it currently being used to prepare a risk report at the dam design stage? <u>Regulation</u>, <u>clause</u> <u>15(2)</u>

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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

## **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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## **Annual Safety Standards Report**

**Dams Safety NSW** 

# Jindabyne Dam - 776

**Snowy River, Jindabyne** 

**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	Jindabyne Dam
Dam location	Snowy River, Jindabyne
Type of dam	Rockfill
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



## **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).



How was this checked?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

#### 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	30/12/2022
Individual risk rating of the dam	2.34x10-6
Societal risk rating of the dam	2.56x10-5
Date of next planned risk report	30/12/2027



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

Hydrologi

Mark Pearse (Principal Hydrologist, HARC)

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

Peter Hill (Principal Hydrologist, HARC)

#### 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

Question

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)	28/06/2022
Planned date for next safety review	26/06/2037

#### 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)** 

adotion .	Allower
If Safety Review commenced after 1 July 2022 - names of independent competent reviewers and their organisation	Richard Frost (Senior Technical Director, GHD)

**Answer** 



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

Question	Answer
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	



## **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)	14/12/2023
Planned date for next 'theoretical classroom' emergency exercise	14/12/2026

#### 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?	Yes
Date of last practical emergency exercise	17/02/2022
Planned date for next practical emergency exercise	17/02/2027



#### **Design and construction**

Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, 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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

## **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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## **Annual Safety Standards Report**

**Dams Safety NSW** 

## Jounama Dam - 387

Tumut River, Talbingo

**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	Jounama Dam
Dam location	Tumut River, Talbingo
Type of dam	Rockfill
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



## **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 C
Has an independent review been done?	Yes
Name of independent reviewer	Peter Hill (Principal, HARC)
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	01/07/2020
Date of next planned consequence category assessment	29/06/2035
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?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

#### 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?	Yes
Do you know the date of your last risk report?	Yes
Date of last risk report	30/12/2022
Individual risk rating of the dam	2.73x10-7
Societal risk rating of the dam	1.01x10-3
Date of next planned risk report	30/12/2027



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

Hydrologi

Mark Pearse (Principal Hydrologist, HARC)

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

Peter Hill (Principal Hydrologist, HARC)

#### 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 <b>Regulation</b> , subclause 20(2)	10/05/2023
Planned date for next safety review	10/05/2038

#### 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	Graeme Bell (Dam Engineering Consultant, UNSW), Mark Foster (Director, Dam Consulting Services), Alan Moon (Engineering Geologist Consultant, UNSW)

#### 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
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	



#### **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)	03/05/2023
Planned date for next 'theoretical classroom' emergency exercise	01/05/2026

#### 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?	Yes
Date of last practical emergency exercise	03/05/2023
Planned date for next practical emergency exercise	03/05/2028



#### **Design and construction**

#### Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, <u>Clause 12(3)</u>

Was the risk management framework used or is it currently being used to prepare a risk report at the dam design stage? <u>Regulation</u>, <u>clause</u> <u>15(2)</u>

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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

# **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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# **Annual Safety Standards Report**

**Dams Safety NSW** 

# Khancoban Dam - 375

**Swampy Plain River, Khancoban** 

**Date of report:** 26/03/2024



#### 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	Khancoban Dam
Dam location	Swampy Plain River, Khancoban
Type of dam	Earthfill
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



# **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).

Dam consequence category  High C  Has an independent review been done?  Name of independent reviewer  Peter Hill (Principal, HARC)  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).  Date of the last consequence category assessment  Date of next planned consequence category assessment  Date of next planned consequence category assessment  No  No  No	Question	Answer
Name of independent reviewer  Peter Hill (Principal, HARC)  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)  Date of the last consequence category assessment  O1/08/2019  Date of next planned consequence category assessment  O1/08/2034  Has the number of people likely to be affected by a dam failure changed since the last  No	Dam consequence category	High C
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)  Date of the last consequence category assessment  Date of next planned consequence category assessment  O1/08/2019  Has the number of people likely to be affected by a dam failure changed since the last  No	Has an independent review been done?	Yes
Do you know the date of the last consequence category assessment by a competent person?  Regulation, subclause 3 (1)  Date of the last consequence category assessment  Date of next planned consequence category assessment  O1/08/2019  Has the number of people likely to be affected by a dam failure changed since the last  No	Name of independent reviewer	Peter Hill (Principal, HARC)
Category assessment by a competent person?  Regulation, subclause 3 (1)  Date of the last consequence category assessment  Date of next planned consequence category assessment  O1/08/2034  Has the number of people likely to be affected by a dam failure changed since the last  No	Why has no independent review been done?	
Date of next planned consequence category assessment  O1/08/2019  O1/08/2019  O1/08/2034  Has the number of people likely to be affected by a dam failure changed since the last  No	category assessment by a competent person?	Yes
Has the number of people likely to be affected by a dam failure changed since the last No		01/08/2019
by a dam failure changed since the last No		01/08/2034
	by a dam failure changed since the last	No



How was this checked?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you review	red it?
Date of last review	26/09/2023

#### 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	21/12/2023
Individual risk rating of the dam	2.2x10-6
Societal risk rating of the dam	2.4x10-4
Date of next planned risk report	21/12/2028



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

Peter Ian Hill, HARC Services Pty Ltd

Dr Mark Andrew Foster, Dam Consulting Services Pty Ltd

#### 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 <b>Regulation</b> , subclause 20(2)	03/06/1991
Planned date for next safety review	31/12/2024

#### 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

Question	Answer
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	



#### **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)	28/10/2021
Planned date for next 'theoretical classroom' emergency exercise	28/10/2024

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

Question	Answer
Have you done a practical emergency exercise?	Yes
Date of last practical emergency exercise	02/11/2023
Planned date for next practical emergency exercise	02/11/2028



#### **Design and construction**

Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, 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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

# **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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# **Annual Safety Standards Report**

**Dams Safety NSW** 

# **Murray 2 Dam - 371**

Khancoban Back Creek, Khancoban

**Date of report:** 26/03/2024



#### 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	Murray 2 Dam
Dam location	Khancoban Back Creek, Khancoban
Type of dam	Concrete arch
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



# **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	
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	01/08/2019
Date of next planned consequence category assessment	01/08/2034
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?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you review	red it?
Date of last review	26/09/2023

#### 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	21/12/2023
Individual risk rating of the dam	3.4x10-6
Societal risk rating of the dam	6.6x10-6
Date of next planned risk report	21/12/2028



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

Peter H
Principal HARC)

Peter Hill (Director and Principal Hydrologist, HARC)

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

Mark Foster (Dams Engineer, Dam Consulting Services Pty Ltd)

#### 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. <u>Regulation</u>, <u>clause 19</u>

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)	01/06/1992
Planned date for next safety review	31/12/2024

#### 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

Question	Answer
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	



#### **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)	28/10/2021
Planned date for next 'theoretical classroom' emergency exercise	28/10/2024

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

Question	Answer
Have you done a practical emergency exercise?	Yes
Date of last practical emergency exercise	02/11/2023
Planned date for next practical emergency exercise	02/11/2028



#### **Design and construction**

Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, 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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

# **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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# **Annual Safety Standards Report**

**Dams Safety NSW** 

# Talbingo Dam - 687

**Tumut River, Talbingo** 

Date of report: 29/03/2024



### 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	Talbingo Dam
Dam location	Tumut River, Talbingo
Type of dam	Rockfill
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



# **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	Extreme
Has an independent review been done?	Yes
Name of independent reviewer	Peter Hill (Principal, HARC)
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	1/05/2021
Date of next planned consequence category assessment	1/05/2036
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?	Study and report by consultant	
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?	



### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you review	red it?
Date of last review	26/09/2023

### 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?	Yes
Do you know the date of your last risk report?	Yes
Date of last risk report	21/06/2023
Individual risk rating of the dam	5.6x10-6
Societal risk rating of the dam	3.8x10-3
Date of next planned risk report	21/06/2028



Name of competent person and their organisation who signed off the risk Mark Pearse (Principal report (if risk report recommenced after 1 July 2022) Hydrologist, HARC)

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

Mark Foster (Director, Dam Consulting Services)

### 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 <b>Regulation</b> , subclause 20(2)	18/03/2022
Planned date for next safety review	18/03/2037

#### 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	Graeme Bell (Dam Engineering Consultant, University of NSW or UNSW) Mark Foster (Director, Dam Consulting Services) Alan Moon (Engineering Geologist Consultant, UNSW)



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	N/A

### 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
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	



### **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)	3/05/2023
Planned date for next 'theoretical classroom' emergency exercise	3/05/2026

### 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?	Yes
Date of last practical emergency exercise	18/05/2023
Planned date for next practical emergency exercise	18/05/2028



### **Design and construction**

#### Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, <u>Clause 12(3)</u>

Was the risk management framework used or is it currently being used to prepare a risk report at the dam design stage? <u>Regulation</u>, <u>clause</u> <u>15(2)</u>

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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

# **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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# **Annual Safety Standards Report**

**Dams Safety NSW** 

# Tantangra Dam - 356

Murrumbidgee River, Tantangra

**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	Tantangra Dam
Dam location	Murrumbidgee River, Tantangra
Type of dam	Concrete gravity
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



# **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).



How was this checked?	Study and report by consultant	
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?	



### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

### 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	30/12/2022
Individual risk rating of the dam	7.14x10-9
Societal risk rating of the dam	2.35x10-6
Date of next planned risk report	30/12/2027



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

Hydrologi

Mark Pearse (Principal Hydrologist, HARC)

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

Peter Hill (Principal Hydrologist, HARC)

### 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)	01/11/2018
Planned date for next safety review	01/11/2033

### 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	Brian Cooper (Director, Brian Cooper Consulting)



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

Question	Answer
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	



### **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)	22/11/2022
Planned date for next 'theoretical classroom' emergency exercise	21/11/2025

### 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?	No
Date of last practical emergency exercise	
Planned date for next practical emergency exercise	30/12/2024



### **Design and construction**

Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, 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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

# **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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# **Annual Safety Standards Report**

**Dams Safety NSW** 

# Tooma Dam - 735

Tooma River, Kosciusko National Park

**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	Tooma Dam
Dam location	Tooma River, Kosciusko National Park
Type of dam	Earthfill
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



# **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).



How was this checked?	Study and report by consultant	
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?	



### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

### 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	30/12/2022
Individual risk rating of the dam	2.25x10-7
Societal risk rating of the dam	2.15x10-5
Date of next planned risk report	30/12/2027



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

Hydrologi

Mark Pearse (Principal Hydrologist, HARC)

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

Peter Hill (Principal Hydrologist, HARC)

### 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)	22/01/2015
Planned date for next safety review	22/01/2030

#### 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 - last DSR completed in 2014 prior to Regulation 20(6) became applicable after 01/07/2022

### 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
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	



### **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)	28/10/2021
Planned date for next 'theoretical classroom' emergency exercise	21/10/2024

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

Question	Answer
Have you done a practical emergency exercise?	Yes
Date of last practical emergency exercise	02/11/2023
Planned date for next practical emergency exercise	02/11/2028



#### **Design and construction**

#### Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, <u>Clause 12(3)</u>

Was the risk management framework used or is it currently being used to prepare a risk report at the dam design stage? <u>Regulation</u>, <u>clause</u> <u>15(2)</u>

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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

# **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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# **Annual Safety Standards Report**

**Dams Safety NSW** 

# **Tumut 2 Dam - 775**

Tumut River, Cabramurra

**Date of report:** 26/03/2024



#### 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	Tumut 2 Dam
Dam location	Tumut River, Cabramurra
Type of dam	Concrete gravity
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



# **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	
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	01/08/2019
Date of next planned consequence category assessment	01/08/2034
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?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

#### 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	21/12/2023
Individual risk rating of the dam	1.5x10-7
Societal risk rating of the dam	2.1x10-4
Date of next planned risk report	21/12/2028



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

Peter Hill (Director and Principal Hydrologist, HARC)

Mark Foster (Dams Engineer, Dam Consulting Services Pty Ltd)

#### 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?	Yes
How many incidents?	1
Topic/subject of the incident(s)	(i) a failure of a control system that had the potential to: (i) endanger the safe operation of the dam, or (ii) endanger the safety of a person, or (iii) cause damage to property or the environment, or (iv) cause an uncontrolled release of the contents of the dam,



#### 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)	01/07/1991
Planned date for next safety review	31/12/2024

#### 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

Question	Answer
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	



### **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)	22/11/2022
Planned date for next 'theoretical classroom' emergency exercise	22/11/2025

#### 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? <u>Regulation</u>, 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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

# **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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# **Annual Safety Standards Report**

**Dams Safety NSW** 

# **Tumut 3 Inlet Structure - 797**

**Tumut River, Talbingo** 

**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	Tumut 3 Inlet Structure
Dam location	Tumut River, Talbingo
Type of dam	Concrete gravity
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	No
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



# **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).

Answer
Extreme
Yes
David Stephens (Principal Hydrologist, HARC)
Yes
01/05/2021
01/05/2036
No



How was this checked?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you reviewed it?	Yes
Date of last review	26/09/2023

#### 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?	Yes
Do you know the date of your last risk report?	Yes
Date of last risk report	21/06/2023
Individual risk rating of the dam	3.2x10-5
Societal risk rating of the dam	1.3x10-3
Date of next planned risk report	25/08/2028



Name of competent person and their organisation who signed off the risk Mark Pearse (Principal report (if risk report recommenced after 1 July 2022) Hydrologist, HARC)

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

Mark Foster (Director, Dam Consulting Services)

#### 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 <b>Regulation</b> , subclause 20(2)	18/03/2022
Planned date for next safety review	18/03/2037

#### 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	Graeme Bell (Dam Engineering Consultant, UNSW), Mark Foster (Director, Dam Consulting Services), Alan Moon (Engineering Geologist Consultant, UNSW)



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

Question	Answer
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	



#### **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)	03/05/2023
Planned date for next 'theoretical classroom' emergency exercise	03/05/2026

#### 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?	Yes
Date of last practical emergency exercise	18/05/2023
Planned date for next practical emergency exercise	18/05/2028



#### **Design and construction**

Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, 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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

# **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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# **Annual Safety Standards Report**

**Dams Safety NSW** 

# **Tumut Pond Dam - 774**

Tumut River, Cabramurra

**Date of report:** 26/03/2024



#### 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	Tumut Pond Dam
Dam location	Tumut River, Cabramurra
Type of dam	Concrete arch
Main purpose of dam	Hydroelectric
Other	
Is the dam built on a river, stream or watercourse?	Yes
Name of dam owner	Snowy Hydro Limited
ACN number	090574431



# **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).



How was this checked?	Study and report by consultant	
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?	



#### Dam safety management system review

Question	Answer
Since implementing your dam safety management system, have you review	red it?
Date of last review	26/09/2023

#### 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	21/12/2023
Individual risk rating of the dam	2.1x10-7
Societal risk rating of the dam	5.7x10-4
Date of next planned risk report	21/12/2028



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

Peter H
Principal HARC)

Peter Hill (Director and Principal Hydrologist, HARC)

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

Mark Foster (Dams Engineer, Dam Consulting Services Pty Ltd)

#### 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)	01/04/1989
Planned date for next safety review	31/12/2024

#### 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

Question	Answer
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	



#### **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)	22/11/2022
Planned date for next 'theoretical classroom' emergency exercise	22/11/2025

#### 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?	No
Date of last practical emergency exercise	
Planned date for next practical emergency exercise	30/12/2024



#### **Design and construction**

Dam safety management system for design and construction

Question Answer

Does the dam safety management system cover dam design and construction? <u>Regulation</u>, 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?

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 <u>Regulation</u>, <u>clause</u> <u>24</u>

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	26/09/2023
Date of last Operations and Maintenance Plan review	26/09/2023
Is last year's Annual Dams Safety Standards Report published on your website?	Yes
Provide the link to the report	https://www.snowyhydro.com.au/about/reports/

# **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> <li>2 directors, or</li> <li>1 director and 1 company secretary</li> <li>The combined director and company secreatary (where there is only 1 director)</li> </ul>
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	<ul> <li>Corporation with 2 or more members:</li> <li>President, chairperson or another principal officer of the corporation</li> <li>Sole corporation</li> <li>The person who constituted the constitution</li> <li>The person managing the affairs of the corporation</li> </ul>
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	Dennis Barnes
Position of declared dam owner office holder attesting to the accuracy of this report	Managing Director and CEO
Signature	
Name of declared dam owner office holder attesting to the accuracy of this report	Suzannah Fletcher
Position of declared dam owner office holder attesting to the accuracy of this report	Company Secretary
Signature	

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