**Annual Dams Safety Standards Report** 

Response ID: <u>40138</u>

Submitted Date: 27/03/23 16:55:09 Completion Time: 1 hr. 22 min. 48 sec.

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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.

# How to submit your Annual Dams Safety Standards Report

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Tumut Pond Dam - Tumut River, Cabramurra

Type of dam (If a combination, then consider major type)

#### Concrete arch

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

#### Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

#### Winsome Whyte

Phone Email address

Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

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### **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

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

#### Yes

Name of independent reviewer (must be a competent person)

#### Peter Hill (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

01/08/2019

Date next consequence category assessment planned

#### 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

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# Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snowyhydro.com.au

## Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

Yes

# Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

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# Dam safety management system review

Since implementing your dam safety management system, have you reviewed it?  $\mathbf{Yes}$ 

Date of last review

03/11/2022

# Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

Is your dam above the safety threshold?

No

Do you know the date of your last risk report?

Yes

Date of last risk report

01/08/2019

Individual risk rating of the dam

0

Societal risk rating of the dam

0

Date of next planned risk report

#### 1/08/2024

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

N/A

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

N/A

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# Other safety requirements - Regulation, Part 6

#### **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

#### 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 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

Date of last safety review Regulation, subclause 20(2) 1/04/1989

Planned date for next safety review 31/12/2023

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# 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)

If Safety Review commenced after 1 July 2022 - names of independent competent reviewers and their organisation  $\,$ 

N/A

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

Name of independent competent reviewer and their organisation

Peer reviewers of the Upper Tumut DSRs that are currently in progress comprise: Richard Rodd (Dam Engineering Consultant, Richard Rodd & Associates) Mark Eggers (Principal, Pells Sullivan Meynink or PSM)

# 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

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

No

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# **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **22/11/2022** 

Planned date of 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. Regulation, subclauses 22 (3) and 22 (4)

Have you done a practical emergency exercise?

No

Planned date of next practical emergency exercise **30/12/2024** 

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# **Design and construction**

Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

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

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

### **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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#### **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)		
Local council	General Manager		
Company	• 2 directors, or		
	• 1 director and 1 company secretary		
	• The combined director and company secretary (Where		
	there is only 1 director)		
Statutory state- owned	Chief Executive Officer or Managing Director responsible		
corporation	for managing the operation of the statutory state-owned		
	corporation in accordance with the general policies and		
	specific directions of the board		
Statutory corporation	Corporation with 2 or more members:		
	• President, chairperson or another principal officer of the		
	corporation		
	• Sole corporation		
	• The person who constituted the constitution		
	The person managing the affairs of the corporation		
Government department	Secretary		
Individual	Individual		

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature:

**Annual Dams Safety Standards Report** 

Response ID: <u>40146</u>

Submitted Date: 27/03/23 17:02:08

Completion Time: 18 min.

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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.

# How to submit your Annual Dams Safety Standards Report

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Tumut 3 Inlet Structure - Tumut River, Talbingo

Type of dam (If a combination, then consider major type)

#### **Concrete gravity**

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

No

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

Winsome Whyte

Phone Email address

Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

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### **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

#### Extreme

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

#### Yes

Name of independent reviewer (must be a competent person)

#### David Stephens (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

1/5/2021

Date next consequence category assessment planned

1/5/2026

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

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# Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snowyhydro.com.au

## Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

Yes

# Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

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Page 4 of 9

# Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

# Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

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

3.2E-5

Societal risk rating of the dam

1.3E-3

Date of next planned risk report

#### 25/08/2037

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

#### 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 Hyd, HARC)

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# Other safety requirements - Regulation, Part 6

#### **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

#### 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 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

Date of last safety review Regulation, subclause 20(2) **18/03/2022** 

Planned date for next safety review 18/03/2037

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# 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)

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

Graeme Bell (Dam Engineering ConsultantUNSW) 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)

Name of independent competent reviewer and their organisation  $\mathbf{N/A}$ 

## 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

Is any significant change to the configuration of the dam planned?  ${f No}$ 

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# **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **2/07/2020** 

Planned date of next 'theoretical classroom' emergency exercise 3/05/2023

# For extreme or high consequence dams only

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

Have you done a practical emergency exercise?

No

Planned date of next practical emergency exercise 18/05/2023

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# **Design and construction**

Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

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

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

### **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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#### **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)		
Local council	General Manager		
Company	• 2 directors, or		
	• 1 director and 1 company secretary		
	• The combined director and company secretary (Where		
	there is only 1 director)		
Statutory state- owned	Chief Executive Officer or Managing Director responsible		
corporation	for managing the operation of the statutory state-owned		
	corporation in accordance with the general policies and		
	specific directions of the board		
Statutory corporation	Corporation with 2 or more members:		
	• President, chairperson or another principal officer of the		
	corporation		
	• Sole corporation		
	• The person who constituted the constitution		
	The person managing the affairs of the corporation		
Government department	Secretary		
Individual	Individual		

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature:

**Annual Dams Safety Standards Report** 

Response ID: <u>40147</u>

Submitted Date: 27/03/23 17:09:33 Completion Time: 15 min. 39 sec.

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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).

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

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Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report **24/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Tumut 2 Dam - Tumut River, Cabramurra

Type of dam (If a combination, then consider major type)

#### **Concrete gravity**

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

Winsome Whyte

Phone Email address Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

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### **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

#### **Significant**

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes 1/08/2019

Date next consequence category assessment planned

#### 1/08/2024

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

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# Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

**Email** 

winsome.whyte@snowyhydro.com.au

# Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

Yes

# Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam?

Yes

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# Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

# Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

Is your dam above the safety threshold?

No

Do you know the date of your last risk report?

Yes

Date of last risk report

1/08/2019

Individual risk rating of the dam

**Negligible** 

Societal risk rating of the dam

2.0E-8

Date of next planned risk report

1/08/2024

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

N/A

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

N/A

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# Other safety requirements - Regulation, Part 6

### **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

#### 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 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

Date of last safety review Regulation, subclause 20(2)

1/07/1991

Planned date for next safety review

31/12/2023

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# 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)

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

N/A

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

Name of independent competent reviewer and their organisation

Peer reviewers of the Upper Tumut DSRs that are currently in progress comprise: Richard Rodd (Dam Engineering Consultant, Richard Rodd & Associates) Mark Eggers (Principal, Pells Sullivan Meynink or PSM)

# 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

Is any significant change to the configuration of the dam planned?  ${f No}$ 

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# **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

Have you done a 'theoretical classroom' emergency exercise? **Yes** 

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **22/11/2022** 

Planned date of next 'theoretical classroom' emergency exercise **2/11/2025** 

# 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. Regulation, subclauses 22 (3) and 22 (4)

Have you done a practical emergency exercise? **No** 

Planned date of next practical emergency exercise **30/12/2024** 

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# **Design and construction**

Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

### Dam safety management system for design and construction

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

Was the risk management framework used or is it currently being used to prepare a risk

report at the dam design stage? Regulation, clause 15(2)

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

## **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review **10/02/2023** 

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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#### **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)		
Local council	General Manager		
Company	• 2 directors, or		
	• 1 director and 1 company secretary		
	• The combined director and company secretary (Where		
	there is only 1 director)		
Statutory state- owned	Chief Executive Officer or Managing Director responsible		
corporation	for managing the operation of the statutory state-owned		
	corporation in accordance with the general policies and		
	specific directions of the board		
Statutory corporation	Corporation with 2 or more members:		
	• President, chairperson or another principal officer of the		
	corporation		
	• Sole corporation		
	• The person who constituted the constitution		
	The person managing the affairs of the corporation		
Government department	Secretary		
Individual	Individual		

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

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**Annual Dams Safety Standards Report** 

Response ID: <u>40151</u>

Submitted Date: 27/03/23 17:16:59 Completion Time: 16 min. 7 sec.

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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.

# **How to submit your Annual Dams Safety Standards Report**

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by **31 March**.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Tooma Dam - Tooma River, Kosciusko National Park

Type of dam (If a combination, then consider major type)

#### Earthfill

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

#### Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

#### Winsome Whyte

Phone Email address

Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

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## **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

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

#### Yes

Name of independent reviewer (must be a competent person)

#### Peter Hill (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

1/08/2019

Date next consequence category assessment planned

#### 1/08/2024

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

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# Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snowyhydro.com.au

## Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

Yes

# Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

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Page 4 of 9

# Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

# Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

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

2.25E-7

Societal risk rating of the dam

2.15E-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 commenced after 1 July 2022)

#### 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)

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Page 5 of 9

# Other safety requirements - Regulation, Part 6

#### **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

#### 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 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

Date of last safety review Regulation, subclause 20(2) **22/01/2015** 

Planned date for next safety review

22/01/2030

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# 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)

If Safety Review commenced after 1 July 2022 - names of independent competent reviewers and their organisation  ${\bf r}$ 

N/A

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

Name of independent competent reviewer and their organisation  $\mathbf{N/\!A}$ 

# 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

Is any significant change to the configuration of the dam planned?  ${f No}$ 

.....

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# **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **28/10/2021** 

Planned date of 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. Regulation, subclauses 22 (3) and 22 (4)

Have you done a practical emergency exercise?

No

Planned date of next practical emergency exercise 31/10/2023

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# **Design and construction**

Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

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

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

### **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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#### **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)		
Local council	General Manager		
Company	• 2 directors, or		
	• 1 director and 1 company secretary		
	• The combined director and company secretary (Where		
	there is only 1 director)		
Statutory state- owned	Chief Executive Officer or Managing Director responsible		
corporation	for managing the operation of the statutory state-owned		
	corporation in accordance with the general policies and		
	specific directions of the board		
Statutory corporation	Corporation with 2 or more members:		
	• President, chairperson or another principal officer of the		
	corporation		
	• Sole corporation		
	• The person who constituted the constitution		
	The person managing the affairs of the corporation		
Government department	Secretary		
Individual	Individual		

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature:

**Annual Dams Safety Standards Report** 

Response ID: <u>40153</u>

Submitted Date: 27/03/23 17:21:45 Completion Time: 15 min. 15 sec.

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Page 1 of 9

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.

## How to submit your Annual Dams Safety Standards Report

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by **31 March**.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Tantangra Dam - Murrumbidgee River, Tantangra

Type of dam (If a combination, then consider major type)

#### **Concrete gravity**

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

#### Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

#### Winsome Whyte

Phone Email address

Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

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Page 2 of 9

## **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 A

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

#### Yes

Name of independent reviewer (must be a competent person)

#### **David Stephens (Senior Flood Modeller, HARC)**

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

12/10/2022

Date next consequence category assessment planned

12/10/2027

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

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## Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snowyhydro.com.au

## Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

Yes

## Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

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Page 4 of 9

## Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

## Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

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

7.14E-9

Societal risk rating of the dam

2.35E-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 commenced after 1 July 2022)

#### 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)

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Page 5 of 9

## Other safety requirements - Regulation, Part 6

### **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

### 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 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

Date of last safety review Regulation, subclause 20(2) 1/11/2018

Planned date for next safety review

1/06/2033

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## 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)

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)

Name of independent competent reviewer and their organisation  $\mathbf{N/\!A}$ 

## 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

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

No

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## **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **22/11/2022** 

Planned date of next 'theoretical classroom' emergency exercise **30/12/2025** 

## 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. Regulation, subclauses 22 (3) and 22 (4)

Have you done a practical emergency exercise?

No

Planned date of next practical emergency exercise **30/12/2024** 

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## **Design and construction**

Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

### Dam safety management system for design and construction

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

## **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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### **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)		
Local council	General Manager		
Company	• 2 directors, or		
	• 1 director and 1 company secretary		
	• The combined director and company secretary (Where		
	there is only 1 director)		
Statutory state- owned	Chief Executive Officer or Managing Director responsible		
corporation	for managing the operation of the statutory state-owned		
	corporation in accordance with the general policies and		
	specific directions of the board		
Statutory corporation	Corporation with 2 or more members:		
	• President, chairperson or another principal officer of the		
	corporation		
	• Sole corporation		
	• The person who constituted the constitution		
	The person managing the affairs of the corporation		
Government department	Secretary		
Individual	Individual		

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature:

**Annual Dams Safety Standards Report** 

Response ID: 40155

Submitted Date: 27/03/23 17:26:08 Completion Time: 13 min. 18 sec.

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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.

## **How to submit your Annual Dams Safety Standards Report**

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Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

### Talbingo Dam - Tumut River, Talbingo

Type of dam (If a combination, then consider major type)

#### Rockfill

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

#### Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

#### Winsome Whyte

Phone Email address

Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

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## **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

#### Extreme

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

#### Yes

Name of independent reviewer (must be a competent person)

#### Peter Hill (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

1/05/2021

Date next consequence category assessment planned

#### 1/05/2026

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

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## Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snowyhydro.com.au

## Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

Yes

## Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

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## Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

## Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

Is your dam above the safety threshold?

Yes

Do you know the date of your last risk report?

Yes

Date of last risk report

25/08/2022

Individual risk rating of the dam

5.6E-6

Societal risk rating of the dam

3.8E-3

Date of next planned risk report

#### 25/08/2027

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

#### 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)

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## Other safety requirements - Regulation, Part 6

### **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

### 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 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

Date of last safety review Regulation, subclause 20(2) **18/03/2022** 

Planned date for next safety review

18/03/2037

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## 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)

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)

Name of independent competent reviewer and their organisation  $\mathbf{N/A}$ 

## 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

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

No

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## **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **2/07/2020** 

Planned date of next 'theoretical classroom' emergency exercise 3/05/2023

## For extreme or high consequence dams only

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

Have you done a practical emergency exercise?

No

Planned date of next practical emergency exercise 18/05/2023

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## **Design and construction**

Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

### Dam safety management system for design and construction

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

## **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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Page 9 of 9

### **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)		
Local council	General Manager		
Company	• 2 directors, or		
	• 1 director and 1 company secretary		
	• The combined director and company secretary (Where		
	there is only 1 director)		
Statutory state- owned	Chief Executive Officer or Managing Director responsible		
corporation	for managing the operation of the statutory state-owned		
	corporation in accordance with the general policies and		
	specific directions of the board		
Statutory corporation	Corporation with 2 or more members:		
	• President, chairperson or another principal officer of the		
	corporation		
	• Sole corporation		
	• The person who constituted the constitution		
	The person managing the affairs of the corporation		
Government department	Secretary		
Individual	Individual		

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature:

Annual Dams Safety Standards Report

Response ID: <u>40156</u>

Submitted Date: 27/03/23 17:30:58 Completion Time: 12 min. 13 sec.

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Page 1 of 9

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.

## **How to submit your Annual Dams Safety Standards Report**

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Murray 2 Dam - Khancoban Back Creek, Khancoban

Type of dam (If a combination, then consider major type)

Concrete arch

Main purpose of dam

Hydroelectric

Is the dam built on a river, stream or watercourse?

Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

Winsome Whyte

Phone Email address Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

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## **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

#### **Significant**

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

1/08/2019

Date next consequence category assessment planned

#### 1/08/2024

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

#### (Page 3 /9)

Page 3 of 9

## Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

**Email** 

winsome.whyte@snowyhydro.com.au

## Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

Yes

## Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam?

Yes

#### (Page 4 /9)

Page 4 of 9

## Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

## Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

Is your dam above the safety threshold?

No

Do you know the date of your last risk report?

Yes

Date of last risk report

1/03/2019

Individual risk rating of the dam

9.2E-9

Societal risk rating of the dam

4.6E-8

Date of next planned risk report

1/02/2023

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

N/A

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

N/A

#### (Page 5 /9)

Page 5 of 9

## Other safety requirements - Regulation, Part 6

## **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

## 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 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

Date of last safety review Regulation, subclause 20(2)

1/06/1992

Planned date for next safety review

31/12/2023

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## 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)

If Safety Review commenced after 1 July 2022 - names of independent competent reviewers and their organisation  $\,$ 

N/A

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

Name of independent competent reviewer and their organisation

Peer Reviewers of the Murray DSRs that are currently in progress comprise: Peter Darling (Chief Technical Principal - Dams, Snowy Mountains Engineering Consultants or SMEC) Mark Eggers (Principal, Pells Sullivan Meynink)

## 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

Is any significant change to the configuration of the dam planned?  ${f No}$ 

#### (Page 7 /9)

Page 7 of 9

## **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

Have you done a 'theoretical classroom' emergency exercise? **Yes** 

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **28/10/2021** 

Planned date of 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. Regulation, subclauses 22 (3) and 22 (4)

Have you done a practical emergency exercise? **No** 

Planned date of next practical emergency exercise 31/10/2023

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Page 8 of 9

## **Design and construction**

Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

## Dam safety management system for design and construction

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

Was the risk management framework used or is it currently being used to prepare a risk

report at the dam design stage? Regulation, clause 15(2)

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

## **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review **10/02/2023** 

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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Page 9 of 9

#### **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)		
Local council	General Manager		
Company	• 2 directors, or		
	• 1 director and 1 company secretary		
	• The combined director and company secretary (Where		
	there is only 1 director)		
Statutory state- owned	Chief Executive Officer or Managing Director responsible		
corporation	for managing the operation of the statutory state-owned		
	corporation in accordance with the general policies and		
	specific directions of the board		
Statutory corporation	Corporation with 2 or more members:		
	• President, chairperson or another principal officer of the		
	corporation		
	• Sole corporation		
	• The person who constituted the constitution		
	The person managing the affairs of the corporation		
Government department	Secretary		
Individual	Individual		

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

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**Annual Dams Safety Standards Report** 

Response ID: <u>40160</u>

Submitted Date: 27/03/23 17:33:54 Completion Time: 21 min. 4 sec.

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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.

## **How to submit your Annual Dams Safety Standards Report**

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Khancoban Dam - Swampy Plain River, Khancoban

Type of dam (If a combination, then consider major type)

#### Earthfill

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

#### Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

#### Winsome Whyte

Phone Email address

Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

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Page 2 of 9

## **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

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

#### Yes

Name of independent reviewer (must be a competent person)

#### Peter Hill (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

1/08/2019

Date next consequence category assessment planned

#### 1/08/2024

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

#### (Page 3 /9)

Page 3 of 9

## Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snowyhydro.com.au

## Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

Yes

## Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

#### (Page 4 /9)

Page 4 of 9

## Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

## Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

Is your dam above the safety threshold?

No

Do you know the date of your last risk report?

Yes

Date of last risk report

1/08/2019

Individual risk rating of the dam

8.4E-7

Societal risk rating of the dam

3.0E-6

Date of next planned risk report

#### 1/02/2023

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

N/A

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

N/A

#### (Page 5 /9)

Page 5 of 9

## Other safety requirements - Regulation, Part 6

### **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

## 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 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

Date of last safety review Regulation, subclause 20(2) 1/06/1991

Planned date for next safety review 31/12/2023

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## 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)

If Safety Review commenced after 1 July 2022 - names of independent competent reviewers and their organisation  $\,$ 

N/A

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

Name of independent competent reviewer and their organisation

Peer Reviewers of the Murray DSRs that are currently in progress comprise: Peter Darling (Chief Technical Principal - Dams, Snowy Mountains Engineering Consultants or SMEC) Mark Eggers (Principal, Pells Sullivan Meynink or PSM)

## 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

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

No

#### (Page 7 /9)

Page 7 of 9

## **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **28/10/2021** 

Planned date of 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. Regulation, subclauses 22 (3) and 22 (4)

Have you done a practical emergency exercise?

No

Planned date of next practical emergency exercise 31/10/2023

(Page 8 /9)

Page 8 of 9

## **Design and construction**

Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

### Dam safety management system for design and construction

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

## **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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Page 9 of 9

### **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)		
Local council	General Manager		
Company	• 2 directors, or		
	• 1 director and 1 company secretary		
	• The combined director and company secretary (Where		
	there is only 1 director)		
Statutory state- owned	Chief Executive Officer or Managing Director responsible		
corporation	for managing the operation of the statutory state-owned		
	corporation in accordance with the general policies and		
	specific directions of the board		
Statutory corporation	Corporation with 2 or more members:		
	• President, chairperson or another principal officer of the		
	corporation		
	• Sole corporation		
	• The person who constituted the constitution		
	The person managing the affairs of the corporation		
Government department	Secretary		
Individual	Individual		

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature:

**Annual Dams Safety Standards Report** 

Response ID: 40162

Submitted Date: 27/03/23 17:38:38 Completion Time: 12 min. 27 sec.

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Page 1 of 9

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.

# **How to submit your Annual Dams Safety Standards Report**

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Jounama Dam - Tumut River, Talbingo

Type of dam (If a combination, then consider major type)

#### Rockfill

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

#### Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

#### Winsome Whyte

Phone Email address

Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

#### (Page 2 /9)

Page 2 of 9

### **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

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

Name of independent reviewer (must be a competent person)

#### Peter Hill (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

1/07/2020

Date next consequence category assessment planned

1/07/2025

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

#### (Page 3 /9)

Page 3 of 9

# Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snowyhydro.com.au

### Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

# Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

#### (Page 4 /9)

Page 4 of 9

# Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

# Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

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

2.73E-7

Societal risk rating of the dam

1.01E-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 commenced after 1 July 2022)

#### 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)

#### (Page 5 /9)

Page 5 of 9

# Other safety requirements - Regulation, Part 6

#### **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

#### 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 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

Date of last safety review Regulation, subclause 20(2) 1/05/1991

Planned date for next safety review 31/12/2023

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# 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)

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)

Name of independent competent reviewer and their organisation  $\mathbf{N/A}$ 

### 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

Is any significant change to the configuration of the dam planned?  ${f No}$ 

#### (Page 7 /9)

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# **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **2/07/2020** 

Planned date of next 'theoretical classroom' emergency exercise 3/05/2023

# For extreme or high consequence dams only

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

Have you done a practical emergency exercise?

No

Planned date of next practical emergency exercise 18/05/2023

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# **Design and construction**

Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

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

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

### **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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#### **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)
Local council	General Manager
Company	• 2 directors, or
	• 1 director and 1 company secretary
	• The combined director and company secretary (Where
	there is only 1 director)
Statutory state- owned	Chief Executive Officer or Managing Director responsible
corporation	for managing the operation of the statutory state-owned
	corporation in accordance with the general policies and
	specific directions of the board
Statutory corporation	Corporation with 2 or more members:
	• President, chairperson or another principal officer of the
	corporation
	• Sole corporation
	• The person who constituted the constitution
	The person managing the affairs of the corporation
Government department	Secretary
Individual	Individual

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature:

Annual Dams Safety Standards Report

Response ID: <u>40163</u>

Submitted Date: 27/03/23 17:44:57 Completion Time: 12 min. 9 sec.

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Page 1 of 9

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.

# **How to submit your Annual Dams Safety Standards Report**

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Jindabyne Dam - Snowy River, Jindabyne

Type of dam (If a combination, then consider major type)

#### Rockfill

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

#### Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

#### Winsome Whyte

Phone Email address

Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

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Page 2 of 9

### **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 A

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

Name of independent reviewer (must be a competent person)

#### Peter Hill (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

1/08/2019

Date next consequence category assessment planned

#### 1/08/2024

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

#### (Page 3 /9)

Page 3 of 9

# Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snowyhydro.com.au

### Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

# Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

#### (Page 4 /9)

Page 4 of 9

# Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

# Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

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

2.34E-6

Societal risk rating of the dam

2.56E-5

Date of next planned risk report

#### 30/12/2037

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

#### 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)

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Page 5 of 9

# Other safety requirements - Regulation, Part 6

#### **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

#### 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 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

Date of last safety review Regulation, subclause 20(2) **28/06/2022** 

Planned date for next safety review

28/06/2037

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# 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)

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

Richard Frost (Senior Technical Director, GHD)

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

Name of independent competent reviewer and their organisation  $\mathbf{N/\!A}$ 

# 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

Is any significant change to the configuration of the dam planned?  ${f No}$ 

.....

#### (Page 7 /9)

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# **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) 7/12/2021

Planned date of next 'theoretical classroom' emergency exercise **7/12/2023** 

# For extreme or high consequence dams only

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

Have you done a practical emergency exercise?

Yes

Date of last practical emergency exercise

17/02/2022

Planned date of next practical emergency exercise

17/02/2027

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Page 8 of 9

# **Design and construction**

# Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

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

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

### **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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#### **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)
Local council	General Manager
Company	• 2 directors, or
	• 1 director and 1 company secretary
	• The combined director and company secretary (Where
	there is only 1 director)
Statutory state- owned	Chief Executive Officer or Managing Director responsible
corporation	for managing the operation of the statutory state-owned
	corporation in accordance with the general policies and
	specific directions of the board
Statutory corporation	Corporation with 2 or more members:
	• President, chairperson or another principal officer of the
	corporation
	• Sole corporation
	• The person who constituted the constitution
	• The person managing the affairs of the corporation
Government department	Secretary
Individual	Individual

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature:

**Annual Dams Safety Standards Report** 

Response ID: <u>40165</u>

Submitted Date: 27/03/23 17:48:30 Completion Time: 10 min. 16 sec.

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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.

# How to submit your Annual Dams Safety Standards Report

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by **31 March**.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Island Bend Dam - Snowy River, Island Bend

Type of dam (If a combination, then consider major type)

#### **Concrete gravity**

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

Winsome Whyte

Phone Email address Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

#### (Page 2 /9)

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### **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

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

Name of independent reviewer (must be a competent person)

#### Peter Hill (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

1/08/2019

Date next consequence category assessment planned

#### 1/08/2024

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

#### (Page 3 /9)

Page 3 of 9

# Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snowyhydro.com.au

### Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

# Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

#### (Page 4 /9)

Page 4 of 9

# Dam safety management system review

Since implementing your dam safety management system, have you reviewed it?  $\mathbf{Yes}$ 

Date of last review

03/11/2022

# Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

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

3.23E-7

Societal risk rating of the dam

6.14E-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 commenced after 1 July 2022)

#### 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)

#### (Page 5 /9)

Page 5 of 9

# Other safety requirements - Regulation, Part 6

#### **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

#### 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 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

Date of last safety review Regulation, subclause 20(2) 11/05/2022

Planned date for next safety review

11/05/2037

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# 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)

If Safety Review commenced after 1 July 2022 - names of independent competent reviewers and their organisation  $\,$ 

N/A

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

Name of independent competent reviewer 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

Is any significant change to the configuration of the dam planned?  ${f No}$ 

#### (Page 7 /9)

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# **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **7/12/2021** 

Planned date of next 'theoretical classroom' emergency exercise **7/12/2023** 

# For extreme or high consequence dams only

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

Have you done a practical emergency exercise?

Yes

Date of last practical emergency exercise

17/2/2022

Planned date of next practical emergency exercise

17/02/2027

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Page 8 of 9

# **Design and construction**

# Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

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

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

### **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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Page 9 of 9

#### **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)
Local council	General Manager
Company	• 2 directors, or
	• 1 director and 1 company secretary
	• The combined director and company secretary (Where
	there is only 1 director)
Statutory state- owned	Chief Executive Officer or Managing Director responsible
corporation	for managing the operation of the statutory state-owned
	corporation in accordance with the general policies and
	specific directions of the board
Statutory corporation	Corporation with 2 or more members:
	• President, chairperson or another principal officer of the
	corporation
	• Sole corporation
	• The person who constituted the constitution
	• The person managing the affairs of the corporation
Government department	Secretary
Individual	Individual

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature:

**Annual Dams Safety Standards Report** 

Response ID: <u>40168</u>

Submitted Date: 27/03/23 17:53:07 Completion Time: 13 min. 23 sec.

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Page 1 of 9

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.

# **How to submit your Annual Dams Safety Standards Report**

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Guthega Dam - Snowy River, Guthega

Type of dam (If a combination, then consider major type)

#### **Concrete gravity**

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

#### Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

#### Winsome Whyte

Phone Email address

Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

#### (Page 2 /9)

Page 2 of 9

### **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 B

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

Name of independent reviewer (must be a competent person)

#### Peter Hill (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

1/08/2019

Date next consequence category assessment planned

#### 1/08/2024

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

#### (Page 3 /9)

Page 3 of 9

# Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snowyhydro.com.au

### Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

## Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

#### (Page 4 /9)

Page 4 of 9

# Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

# Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

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

1.98E-6

Societal risk rating of the dam

3.23E-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 commenced after 1 July 2022)

#### 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)

#### (Page 5 /9)

Page 5 of 9

# Other safety requirements - Regulation, Part 6

#### **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

#### 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 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

Date of last safety review Regulation, subclause 20(2) **05/05/2022** 

Planned date for next safety review **05/05/2037** 

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# 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)

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

Richard Frost (Senior Technical Director, GHD)

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

Name of independent competent reviewer and their organisation  $\mathbf{N/\!A}$ 

# 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

Is any significant change to the configuration of the dam planned?  ${f No}$ 

#### (Page 7 /9)

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# **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **07/12/2021** 

Planned date of next 'theoretical classroom' emergency exercise **07/12/2023** 

# For extreme or high consequence dams only

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

Have you done a practical emergency exercise?

Yes

Date of last practical emergency exercise

17/02/2022

Planned date of next practical emergency exercise

17/02/2027

(Page 8 /9)

Page 8 of 9

# **Design and construction**

# Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

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

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

### **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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#### **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)
Local council	General Manager
Company	• 2 directors, or
	• 1 director and 1 company secretary
	• The combined director and company secretary (Where
	there is only 1 director)
Statutory state- owned	Chief Executive Officer or Managing Director responsible
corporation	for managing the operation of the statutory state-owned
	corporation in accordance with the general policies and
	specific directions of the board
Statutory corporation	Corporation with 2 or more members:
	• President, chairperson or another principal officer of the
	corporation
	• Sole corporation
	• The person who constituted the constitution
	• The person managing the affairs of the corporation
Government department	Secretary
Individual	Individual

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature:

Annual Dams Safety Standards Report

Response ID: 40170

Submitted Date: 27/03/23 18:00:02 Completion Time: 14 min. 56 sec.

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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.

## How to submit your Annual Dams Safety Standards Report

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

#### Geehi Dam - Geehi River, Kosciusko National Park

Type of dam (If a combination, then consider major type)

#### Rockfill

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

#### Yes

Name of dam owner ACN number **Snowy Hydro Limited 090574431** 

Name of contact person Regulation, subclause 24A (3)

### Winsome whyte

Phone Email address

Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

#### (Page 2 /9)

Page 2 of 9

## **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 B

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

Name of independent reviewer (must be a competent person)

### Peter Hill (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

1/08/2019

Date next consequence category assessment planned

#### 1/08/2024

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

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## Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snowyhydro.com.au

## Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

## Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

#### (Page 4 /9)

Page 4 of 9

## Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

## Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

Is your dam above the safety threshold?

No

Do you know the date of your last risk report?

Yes

Date of last risk report

1/08/2019

Individual risk rating of the dam

1.0E-7

Societal risk rating of the dam

6.4E-6

Date of next planned risk report

#### 31/12/2023

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

N/A

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

N/A

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Page 5 of 9

## Other safety requirements - Regulation, Part 6

## **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year **Yes** 

How many incidents

1

Topic/subject of incident(s)

- g) any change in the dam or its surrounds that is abnormal and could indicate an increased risk of the failure 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 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

Date of last safety review Regulation, subclause 20(2) 1/11/1987

Planned date for next safety review **30/12/2023** 

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## 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)

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

Peer Reviewers of the Murray DSRs that are currently in progress comprise: Peter Darling (Chief Technical Principal - Dams, Snowy Mountains Engineering Consultants or SMEC) Mark Eggers (Principal, Pells Sullivan Meynink or PSM)

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

Name of independent competent reviewer and their organisation  $\mathbf{N/A}$ 

## 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

Is any significant change to the configuration of the dam planned?  ${f No}$ 

#### (Page 7 /9)

Page 7 of 9

## **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **28/10/2021** 

Planned date of 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. Regulation, subclauses 22 (3) and 22 (4)

Have you done a practical emergency exercise?

No

Planned date of next practical emergency exercise 31/10/2023

#### (Page 8 /9)

Page 8 of 9

## **Design and construction**

Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

## Dam safety management system for design and construction

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

## **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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### **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)
Local council	General Manager
Company	• 2 directors, or
	• 1 director and 1 company secretary
	• The combined director and company secretary (Where
	there is only 1 director)
Statutory state- owned	Chief Executive Officer or Managing Director responsible
corporation	for managing the operation of the statutory state-owned
	corporation in accordance with the general policies and
	specific directions of the board
Statutory corporation	Corporation with 2 or more members:
	• President, chairperson or another principal officer of the
	corporation
	• Sole corporation
	• The person who constituted the constitution
	• The person managing the affairs of the corporation
Government department	Secretary
Individual	Individual

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

DocuSign Envelope ID: 7CF9B839-DDA8-43EF-BA95-3BB2716656F6

Signature:	

**Annual Dams Safety Standards Report** 

Response ID: <u>40446</u>

Submitted Date: 27/03/23 18:05:57 Completion Time: 5 min. 21 sec.

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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.

## **How to submit your Annual Dams Safety Standards Report**

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report **31/03/2023** 

Section 1 - Declared dam identification details

Dam name and location

## Eucumbene Dam - Eucumbene River, Eucumbene

Type of dam (If a combination, then consider major type)

#### Earthfill

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

#### Yes

Name of dam owner ACN number

### **Snowy Hydro limited 090574431**

Name of contact person Regulation, subclause 24A (3)

### Winsome Whyte

Phone Email address

Website address (if any)

number

0419024608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

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## **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 A

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

Name of independent reviewer (must be a competent person)

#### Peter Hill (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

1/08/2019

Date next consequence category assessment planned

#### 1/08/2024

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

## (Page 3 /9)

Page 3 of 9

## Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

Winsome.Whyte@snowyhydro.com.au

## Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

## Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

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Page 4 of 9

## Dam safety management system review

Since implementing your dam safety management system, have you reviewed it?  $\mathbf{Yes}$ 

Date of last review

3/11/2022

## Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

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

2.15E-7

Societal risk rating of the dam

3.9E-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 commenced after 1 July 2022)

#### 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)

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## Other safety requirements - Regulation, Part 6

## **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

## 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 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

Date of last safety review Regulation, subclause 20(2) 1/12/2018

Planned date for next safety review

1/12/2033

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## 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)

If Safety Review commenced after 1 July 2022 - names of independent competent reviewers and their organisation  ${\bf r}$ 

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)

Name of independent competent reviewer and their organisation  $\mathbf{N}\mathbf{A}$ 

## 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

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

No

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## **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) 7/12/2021

Planned date of next 'theoretical classroom' emergency exercise **7/12/2023** 

## For extreme or high consequence dams only

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

Have you done a practical emergency exercise?

Yes

Date of last practical emergency exercise

17/2/2022

Planned date of next practical emergency exercise

17/2/2027

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Page 8 of 9

## **Design and construction**

## Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

## Dam safety management system for design and construction

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

## **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review **09/12/2022** 

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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Page 9 of 9

### **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)
Local council	General Manager
Company	• 2 directors, or
	• 1 director and 1 company secretary
	• The combined director and company secretary (Where
	there is only 1 director)
Statutory state- owned	Chief Executive Officer or Managing Director responsible
corporation	for managing the operation of the statutory state-owned
	corporation in accordance with the general policies and
	specific directions of the board
Statutory corporation	Corporation with 2 or more members:
	• President, chairperson or another principal officer of the
	corporation
	• Sole corporation
	• The person who constituted the constitution
	• The person managing the affairs of the corporation
Government department	Secretary
Individual	Individual

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature:

**Annual Dams Safety Standards Report** 

Response ID: 40474

Submitted Date: 27/03/23 18:15:34 Completion Time: 9 min. 10 sec.

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Page 1 of 9

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.

## How to submit your Annual Dams Safety Standards Report

Use the online form below to enter information into your Annual Dams Safety Standards Report. Note: you can save your progress and resume at a later time.

Once completed and submitted, you will receive an email with an unsigned pdf copy of your Annual Dams Safety Standards Report. The PDF report then needs to be signed by the dam owner's accountable office holder(s). A digital signature can be used.

Once the report is signed by the correct office holder(s), please email to <a href="mailto:info@damsafety.nsw.gov.au">info@damsafety.nsw.gov.au</a> by 31 March.

Date of report

11/03/2023

Section 1 - Declared dam identification details

Dam name and location

## Eucumbene Dam - Eucumbene River, Eucumbene

Type of dam (If a combination, then consider major type)

#### **Embankment**

Main purpose of dam

#### Hydroelectric

Is the dam built on a river, stream or watercourse?

No

Name of dam owner ACN number

**Snowy Hydro 090574431** 

Name of contact person Regulation, subclause 24A (3)

Winsome Whyte

Phone Email address Website address (if any)

number

0419028608 winsome.whyte@snowyhydro.com.au https://www.snowyhydro.com.au/

#### (Page 2 /9)

Page 2 of 9

## **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 B

For extreme and high consequence dams only If the consequence category is extreme or high, the consequence category assessment must be reviewed by a competent person who has not been involved in the assessment process. Regulation, subclause 7(4) Has an independent review been done?

Name of independent reviewer (must be a competent person)

#### Name of independent reviewer Peter Hill (Principal Hydrologist, HARC)

Do you know the date of last consequence category assessment by a competent person? Regulation, subclause 3 (1)

Date of last consequence category assessment

Yes

01/08/2019

Date next consequence category assessment planned

#### 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

#### (Page 3 /9)

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## Dam safety management system - Regulation, Part 5

The dam safety management system is a structured approach to manage all foreseeable risks relating to dam failure. It is designed to be used by the dam owner to ensure, as far as reasonably practicable, the safety of people, property and the environment is not put at risk from the dam. Regulation Part 5, clause 12

Name of individual responsible for ensuring compliance with dam safety management system

Winsome Whyte

Email

winsome.whyte@snoyhydro.com.au

## Documenting the dam safety management system

Is the dam safety management system fully documented?

Yes

Does the dam safety management system apply to more than one dam?

## Implementing the dam safety management system

Is the dam safety management system fully implemented at this dam? **Yes** 

#### (Page 4 /9)

Page 4 of 9

## Dam safety management system review

Since implementing your dam safety management system, have you reviewed it? **Yes** 

Date of last review

03/11/2022

## Assessment of societal and individual risk rating

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

- at least once every 5 years
- when a major change to the dam is proposed, and
- when required by Dams Safety NSW. Regulation, clause 15

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

2.15E-7

Societal risk rating of the dam

3.9E-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 commenced after 1 July 2022)

#### 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)

#### (Page 5 /9)

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## Other safety requirements - Regulation, Part 6

## **Incident reporting**

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

Have you had any reportable incidents during the 2022 calendar year  ${f No}$ 

## 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 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

Date of last safety review Regulation, subclause 20(2) **01/12/2018** 

Planned date for next safety review

01/12/2033

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## 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)

If Safety Review commenced after 1 July 2022 - names of independent competent reviewers and their organisation  ${\bf r}$ 

N/A

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

Name of independent competent reviewer and their organisation  $\mathbf{N/\!A}$ 

## 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

Has any significant change to the configuration of the dam been made during the 2022 calendar year?

No

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

No

#### (Page 7 /9)

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## **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

Have you done a 'theoretical classroom' emergency exercise?

Yes

Date of last 'theorectical classroom' emergency exercise Regulation, subclause 22(1) **07/12/2021** 

Planned date of next 'theoretical classroom' emergency exercise **07/12/2023** 

## For extreme or high consequence dams only

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

Have you done a practical emergency exercise?

Yes

Date of last practical emergency exercise

17/02/2022

Planned date of next practical emergency exercise

17/02/2027

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## **Design and construction**

## Do not complete this section unless you are in the design, construction, commissioning, or decommissioning phase

## Dam safety management system for design and construction

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

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

# Certain work must be carried out by a person subject to a quality management system <u>Regulation</u>, <u>subclause</u> 23(1)

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

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

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

## **Section 3 - Additional information for Dams Safety NSW**

Date of last Emergency Plan review 9/12/2022

Date of last Operations and Maintenance Plan review 10/02/2023

Did you publish the 2021 Annual Dams Safety Standards Report on your website? **Yes** 

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### **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)
Local council	General Manager
Company	• 2 directors, or
	• 1 director and 1 company secretary
	• The combined director and company secretary (Where
	there is only 1 director)
Statutory state- owned	Chief Executive Officer or Managing Director responsible
corporation	for managing the operation of the statutory state-owned
	corporation in accordance with the general policies and
	specific directions of the board
Statutory corporation	Corporation with 2 or more members:
	• President, chairperson or another principal officer of the
	corporation
	• Sole corporation
	• The person who constituted the constitution
	• The person managing the affairs of the corporation
Government department	Secretary
Individual	Individual

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

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Dennis Barnes - Managing Director and CEO** 

Signature:

Name and position of declared dam owner office holder attesting to the accuracy of this report:

**Suzannah Fletcher - Company Secretary** 

Signature: