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# Annual Safety Standards Report

Dams Safety NSW

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## Liddell Ash Levee - 175

Bayswater Creek, Muswellbrook

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Date of report: 15/02/2024

## Introduction

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

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

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

## Section 1 - Declared dam identification details

| Question  | Answer  |
|---|---|
| Dam name  | Liddell Ash Levee   |
| Dam location  | Bayswater Creek, Muswellbrook                                   |
| Type of dam   | Earthfill   |
| Main purpose of dam                                 | Impound Coal Ash  |
| Other   |   |
| Is the dam built on a river, stream or watercourse? | Yes   |
| Name of dam owner                                   | AGL Macquarie Pty Ltd and Maxwell Ventures (Management) Pty Ltd |
| ACN number  | 167859494   |

## Section 2 - Dams safety standards

### Consequence category of dam - Regulation, Part 3

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

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

| Question   | Answer                                     |
|--|--|
| Dam consequence category   | High C                                     |
| Has an independent review been done?   | Yes  |
| Name of independent reviewer   | Corey Aurala Principal Civil Engineer, WSP |
| Why has no independent review been done?   |  |
| Do you know the date of the last consequence category assessment by a competent person?<br><a href="#">Regulation, subclause 3 (1)</a> | Yes  |
| Date of the last consequence category assessment   | 28/02/2023                                 |
| Date of next planned consequence category assessment   | 28/02/2038                                 |
| Has the number of people likely to be affected by a dam failure changed since the last consequence category review?                    | No   |

## Section 2 continued - Dams safety standards

How was this checked?

Dam owner local knowledge

Other

### Documenting the dam safety management system

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

### Implementing the dam safety management system

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

## Section 2 continued - Dams safety standards

### Dam safety management system review

| Question  | Answer     |
|---|------------|
| Since implementing your dam safety management system, have you reviewed it? | Yes        |
| Date of last review   | 07/08/2023 |

### Assessment of societal and individual risk rating

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

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

| Question                                       | Answer     |
|--|------------|
| Is your dam above the safety threshold?        | No         |
| Do you know the date of your last risk report? | Yes        |
| Date of last risk report                       | 12/05/2023 |
| Individual risk rating of the dam              | 7.81E-08   |
| Societal risk rating of the dam                | 3.63E-05   |
| Date of next planned risk report               | 12/05/2028 |

## Section 2 continued - Dams safety standards

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

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

Darren Pemberton, Closure Service Area Leader and principal Engineer, ATC Williams

### Other safety requirements - Regulation, Part 6

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

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

## Section 2 continued - Dams safety standards

### Safety review

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

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

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

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

| Question   | Answer     |
|--|------------|
| Date of the last safety review <a href="#">Regulation, subclause 20(2)</a> . | 12/05/2023 |
| Planned date for next safety review  | 12/05/2037 |

### For extreme and high consequence dams only

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

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

## Section 2 continued - Dams safety standards

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

| Question  | Answer   |
|---|--|
| Name of independent competent reviewed and their organisation | Darren Pemberton, Closure Area Leader and Principal Engineer, ATC Williams |

### Notification of significant changes to the dam

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

| Question  | Answer  |
|---|---|
| Has any significant change to the configuration of the dam been made during this calendar year? | Yes   |
| Describe the change   | Capping/Decommissioning, Lowering crest and flattening of batters on wall |
| Is any significant change to the configuration of the dam planned?                              | Yes   |
| Describe the change and when is it planned?   | Other   |
| Other   | Capping/Decommissioning, Lowering crest and flattening of batters on wall |
| Date  | 31/12/2024  |



## Section 2 continued - Dams safety standards

### Emergency exercises

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

| Question  | Answer     |
|---|------------|
| Have you done a 'theoretical classroom' emergency exercise?   | Yes        |
| Date of last 'theoretical classroom' emergency exercise <a href="#">Regulation, subclause 22(1)</a> . | 07/12/2021 |
| Planned date for next 'theoretical classroom' emergency exercise                                      | 07/12/2024 |

### For extreme or high consequence dams only

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

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

## Section 2 continued - Dams safety standards

### Design and construction

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

| Question  | Answer |
|---|--------|
| Does the dam safety management system cover dam design and construction? <a href="#">Regulation, Clause 12(3)</a> | Yes    |

|   |     |
|---|-----|
| Was the risk management framework used or is it currently being used to prepare a risk report at the dam design stage? <a href="#">Regulation, clause 15(2)</a> | Yes |
|---|-----|

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

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

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

| Question  | Answer   |
|---|--|
| For Extreme and High consequence category dams, provide the name of the independent person(s) and their organisation who reviewed or are reviewing the design <a href="#">Regulation, clause 24</a> | Darren Pemberton, Closure Area Leader and Principal Engineer, ATC Williams |

|  |    |
|--|----|
| For dams still in an early design phase, have you planned an independent competent person design review? | No |
|--|----|

## Section 3 - Additional information for Dams Safety NSW

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


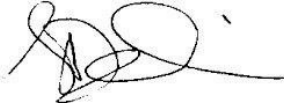
## Section 4 - Attestation

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

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

## Section 4 - Attestation continued

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

|  |  |
|--|--|
| Melinda Hunter   |  |
| Director   |  |
|   |  |
| Suzanna Dabski   |  |
| Company Secretary  |  |
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