

Statement of Reasons

Decision relating to an application for a water licence to take and use groundwater under Section 51 of the Water Act 1989

1. Application details

The application is for a licence to take and use groundwater under section 51 of the Water Act 1989 (**Act**).

Southern Rural Water or the relevant delegated officer as appointed, acts as the Delegate of the Minister for Water (**Minister**).

Application No:	1818772
Applicant:	Alcoa of Australia Pty Ltd
Decision:	To refuse
Dated:	15/07/2026

2. Matters taken into account

The decision maker has taken into account matters required under section 53, including having regard to section 55 and section 40 of the Act.

3. Reasons

The following sets out reasons for the decision.

3.1. Impact of future groundwater take on the environment, including waterways and the estuary, an acid generation

Outcomes arising from a grant of licence is the likely small but potentially significant reductions in shallow groundwater levels and river flows, and an increased risk of catchment acid generation. Consideration associated with this include:

- The groundwater model is the best available tool to examine potential future impacts of the licence application, and the model has been confirmed as robust and fit for purpose by the Independent Technical Review Panel (ITRP).
- Modelling indicated that additional drawdown in the shallow Alluvial Swamp Aquifer could occur in the future, particularly in the mid and upper catchment.
- The ITRP concluded that although acid generation events may be naturally occurring in this catchment the proposed Alcoa groundwater extraction is likely to increase the frequency, extent and severity of acid generation as a result of drawdown in the shallow Alluvial Swamp Aquifer.

- The ITRP concluded there may be broader ecological impacts associated with an increase in river no-flow days and risks to permanent pools on the Anglesea River.
- The ITRP concluded that it is questionable to rely on adaptive management (e.g. triggers for groundwater levels in the Alluvial Swamp Aquifer) to manage the risk of potential environmental impacts, given time lags and natural sensitivity of this environment.
- Based on information provided there remains a high degree of uncertainty regarding the hydro-geo-chemical processes in the catchment and the potential impact of groundwater drawdown and subsequent catchment impact.

3.2 Impact of take on existing authorised uses

It is considered that it is unlikely that there will be any material impact, from the proposed licence, on any existing authorised uses of water within the catchment.

3.3 Combined effects of pumping from the Barwon Water bulk entitlement and the proposed Alcoa licence

The modelling scenarios and risk assessment provided with the application suggest that the potential impacts of Alcoa pumping and the existing Barwon Water bore field pumping its full bulk entitlement, simultaneously, are likely to be significant and produce unacceptable levels of drawdown in the shallow aquifer, and reductions in river flow and associated acid effects, if controls are not in place.

The majority of potential impacts presented in the Alcoa Groundwater Impact Assessment (GIA) are related to Barwon Water's bore field, which extracts from the deeper Lower Eastern View aquifer. These risks are currently managed by trigger levels and actions in the Bulk Entitlement licence arrangement.

3.4 Impacts of the use of the groundwater on waterways and groundwater

The potential for pit water to seep out of the mine once it gets filled and negatively impact on the Anglesea River was considered by the ITRP. The ITRP concluded that the mine water body is generally hydraulically disconnected from the Anglesea River, although there is a small risk that seepage could occur towards the Anglesea River when the mine is full.

3.5 Impact of take and use on Traditional Owner values

Having regard to information provided by Alcoa, considerations raised through the application process indicate that the take and use of groundwater for the proposed licence may result in unacceptable increases in the risk to cultural values associated with the Anglesea River and the Estuary. This relates particularly to the increased risk of acid generation.

3.6 The proposed benefits attributed to the future use of the pit

Regard has been taken to the stated intention of Alcoa to fill the mine using pumped groundwater over a 10-year period to aid with the stability of the mine and to enable fire break/fire fighting resources, to provide visual amenity and enable the Mine Closure and

Rehabilitation Plan. These benefits are potentially significant, however, in considering these it was noted:

- The current pit already contains a significant volume of water.
- A significant amount of work has already been undertaken by Alcoa to stabilise the pit walls which require regular maintenance, however there is no significant risk of mine instability.
- The projections for a natural fill in the GIA are that it will take 26 years (that is 16 years longer than the proposed “fast fill” application period of 10 years).

3.7 Monitoring and risk management

The application includes proposals to monitor the groundwater levels in numerous bores along the catchment and to develop trigger levels for mitigation action. The ITRP review considered that having regard to the information provided it was questionable to rely on adaptive management (e.g. triggers for groundwater levels in the Alluvial Swamp Aquifer) to manage risks of potential environmental consequences, given the time lags and natural sensitivity of this environment.

3.8 Summary

- The Anglesea River catchment provides for considerable cultural, environmental, social and economic values. The catchment is naturally acidic and ephemeral and has a history of low river flows and acid flush events.
- The proposed use, if a licence is granted, is likely to result in a small but potentially significant groundwater drawdown in parts of that shallow swamp aquifer system. This presents an increased risk of acid generation and a reduction in surface water flows. These changes may result in an unacceptable increase in the risk to the environment and the range of other values that depend on the Anglesea River.
- It is a questionable proposition, and contrary to an appropriate precautionary approach, to rely upon the proposed adaptive management approach to manage the potential risks, given the time lags and natural sensitivities of this environment.
- There remains a high degree of uncertainty regarding the hydro-geo-chemical processes in this catchment and a precautionary approach should extend to a 10-year rapid fill pursuant to the licence. It is considered that this time saving provides limited benefits when compared to the potential risks associated with the proposed extraction of groundwater.

4. Decision

Having regard to all relevant factors and in particular the key considerations outlined in this Statement of Reasons, the decision was made to refuse the application.

Signed by:
Scott Cornish
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Signature of Delegate

Scott Cornish - Managing Director

Name of Delegate

15/07/2026

Date