

September 2024

Alcoa Anglesea Update



Welcome to Alcoa's latest Anglesea community update

While we have been keeping the local community up to date with our efforts to formalise an approved mine water filling strategy, it is timely to also provide an in depth update of our activities on the ground across our former mine and power station site.

With spring in the air, we've made progress on a number of fronts which I am pleased to share with our readers in the update below.

Warren Sharp | Site Asset Manager

Environment, health and safety

Critically for Alcoa, our work on site continues to be completed safely, with zero injuries recorded this year by our workforce and contractors. Similarly, no environmental non-compliances were reported.

All of the power station environmental remediation works also continue to be oversighted by the EPA appointed auditor who recently attended site for a periodic walkover, observing the site remediation works and confirming that all controls set out in the Environmental Management Plan were in place and effective.

Power station remediation

Consistent with our Remediation Action Plan for the power station site, our remediation contractor has made significant progress in recovering and treating localised hydrocarbon impacted soils to facilitate onsite re-use - a process commonly known as bioremediation.

A large portion of the open excavations have been backfilled with remediated soils, following approval from the EPA appointed auditor, while fertiliser and mulch has been mixed into the remaining biopiles to assist with breakdown of hydrocarbons before they are able to be re-used.

Where the recovered soils are deemed not amenable to remediation, offsite treatment and/or disposal will be undertaken.

All onsite power station bioremediation works will continue to be compliant with the site Environmental Action Notice and are expected to be complete by early-2025.

Maintenance and monitoring

Maintenance and monitoring of rehabilitated areas in the mine are key parts of our objective to ensure a safe, stable and sustainable landform.

This program includes extensive weed management, erosion repairs, stability monitoring and regular geotechnical and vegetation expert inspections – activities that are expected to continue over the next five to 10 years.

Annual erosion repairs and mitigation strategy

Significant progress has been made in the implementation of this year's erosion repair program, with our mine earthworks contractor completing all of the required lower slope repairs.

Several new engineered intercept drains along the shallow water zone have been installed, along with a number of new engineered batter drains as part of the strategy to reduce runoff generated erosion of the lower slopes.

Under the guidance of our consulting ecologists, we are also planning a lower slope vegetation trial across a number of small areas. If suitable vegetation can be established on the lower slopes, this would further assist in reducing runoff generated erosion in these areas.

Some preliminary works have been undertaken however the type of vegetation and the methodology is yet to be confirmed.

Weed removal works

Our focus on inspecting for and removing weedy vegetation continues, including various woody weed varieties and other species as guided by the 'Weeds of the Surf Coast Shire' booklet.

These works have included a highly successful treatment of broadleaf weeds within the grasslands, along with an exotic weed treatment trial currently underway.

The intent of the trial is to determine a selective treatment program that will be effective against exotic weeds without having an adverse impact on the establishing Wallaby grasses.

We also continue to monitor soil nutrients where appropriate, including in the developing grasslands area and have provided the Wallaby grass a little nutrient 'boost' with the application of a fertiliser mix.

This was also applied to the quickly developing vegetation cover on the asbestos landfill cap.

Community

We've recently hosted three tours for community members and interest groups keen to see firsthand the work we've undertaken onsite, including:

- Post graduate students from RMIT University of Melbourne studying Regenerative Tourism and Transformation
- A group of local artists who work with various artistic mediums
- RMIT SLAB (Student Landscape Architecture Body) - a student run and organised body within the landscape architecture course based at RMIT University

Tour expressions of interest for groups are welcomed via angleseaps@alcoa.com.au.

New shallow water zone intercept drain.



Power station soil remediation showing biopiles and excavated areas.



An update from Eden Project

It's been a while since you last heard from the Eden Project team and we are aware that many in the community are keen to have an update on our work in Anglesea.

The first and most important point we need to make is that the Eden Project remains enthusiastic about the potential for an Eden Project on Alcoa's former coalmine site in Anglesea.

The site is in a great location and has the potential to become a living demonstration of the Eden Project's ethos of transformation and regeneration. We are pleased that Alcoa and many others in the community share our enthusiasm for this vision.

However, it's obvious that development of the project hasn't happened as quickly as we would have liked, due to a variety of factors out of our control. This doesn't dampen our enthusiasm but does necessitate a re-evaluation, especially as the global context has changed significantly since work began.

In May 2019 when the Eden Project Anglesea was announced, no one had heard of Covid-19 and the global geopolitical picture looked significantly different.

Back then, the Eden Project was a single site in Cornwall in south-west England with ambitions to expand beyond that. Now in 2024, our expansion programme has taken flight and we are in the advanced stages of developing two additional UK projects with strong community and government support, in Morecambe in north-west England and Dundee in Scotland. Morecambe is on the cusp of construction and Dundee has recently received planning permission so these projects are the focus of our expansion teams and leave limited capacity for work elsewhere.

Active development of this project is, therefore, currently paused but we remain in regular contact with Alcoa and, under the right circumstances including resolution of land tenure, we would be excited to resume work in Anglesea.

Eden Project team

Mine water filling strategy

Following consideration of feedback received during three well-attended community open house sessions in May and backed by almost four years' of technical work, we submitted a formal groundwater licence amendment application with Southern Rural Water in late-July, requesting approval to pump groundwater from the Upper Eastern View Formation (UEVF) to help fill the mine pit in seven to ten years.

The amended application seeks 1.5 gigalitres per year for up to 10 years, a volume that represents less than 0.1 per cent of the aquifer's total groundwater content and 60 per cent less than the historical extraction rate.

If approved, the licence will enable Alcoa to accelerate the return of the former mine site to the community, while providing long-term environmental benefits sooner, in contrast to a natural fill approach, which would take approximately 50 years. The application is subject to assessment and approval by Southern Rural Water, who are expected to run their own community engagement activities in due course.

The full community engagement report is viewable on our website at www.alcoa.com/anglesea.

Frequently asked questions

Is Alcoa pursuing groundwater to enable future land uses such as the Eden Project concept?

We have a regulatory obligation to develop the final Anglesea Mine Rehabilitation and Closure Plan.

The mine water filling strategy is independent of any future land use concepts.

Is extraction of groundwater impacting the Anglesea River?

We've undertaken extensive technical work assessing the possibility of using groundwater to fill the mine pit.

This rigorous process spanning almost four years has included analysis of hydrogeological models, actual historical data, independent technical studies, groundwater pumping tests, as well as the development of a groundwater model in conjunction with Barwon Water - all of which have confirmed the proposed extraction would have no adverse impact on groundwater dependent ecosystems, including the Anglesea River.

Similarly, historical studies commissioned by Victorian government agencies provide no evidence that our operations have negatively contributed to the health of the Anglesea River.

Why is groundwater Alcoa's preferred method?

Over the journey, we have investigated a wide range of options to support filling the mine pit in a timely manner, including restoration of Salt Creek, recycled water, Lower Eastern View Formation (LEVF) groundwater, seawater and desalination.

Investigations into a natural fill have also been undertaken, with modelling indicating it would take approximately 50 years to fill, during which time community access to the area would remain restricted.

The only currently feasible options are the potential use of Upper Eastern View Formation (UEVF) groundwater or natural fill.

Our investigations have involved comprehensive scientific and technical testing to ensure the approach is responsible, poses little environmental risk, and delivers the best outcomes for the community.

Is there a link between groundwater extraction and the acidification of the Anglesea River?

We appreciate that the health of the Anglesea River is an important issue to the community.

Throughout mine rehabilitation and closure works, rigorous scientific and technical testing has been conducted to ensure that the chosen approach is environmentally responsible and safe for the community. The results of this rigorous testing and analysis have indicated that the acidity of the Anglesea River is influenced by naturally occurring factors.

The soil surrounding the river and the peat swamps within the river catchments, naturally contain acid sulphate materials. During periods of drying and heavy rain, water flows through the soil and peats, and into the river, affecting its pH levels.

Our activities have been subject to many independent technical studies, none of which have found that we've had an adverse impact on groundwater dependent ecosystems, including the Anglesea River.

Stay informed

We acknowledge the importance of our activities to the community and will continue to engage with you as we work toward delivering the best possible outcomes for the future of the site, the community and the environment.

As always, if you have any feedback or questions for Alcoa, please do not hesitate to contact the Anglesea team via angleseaps@alcoa.com.au. To read more about our activities including previous updates, visit www.alcoa.com/anglesea.