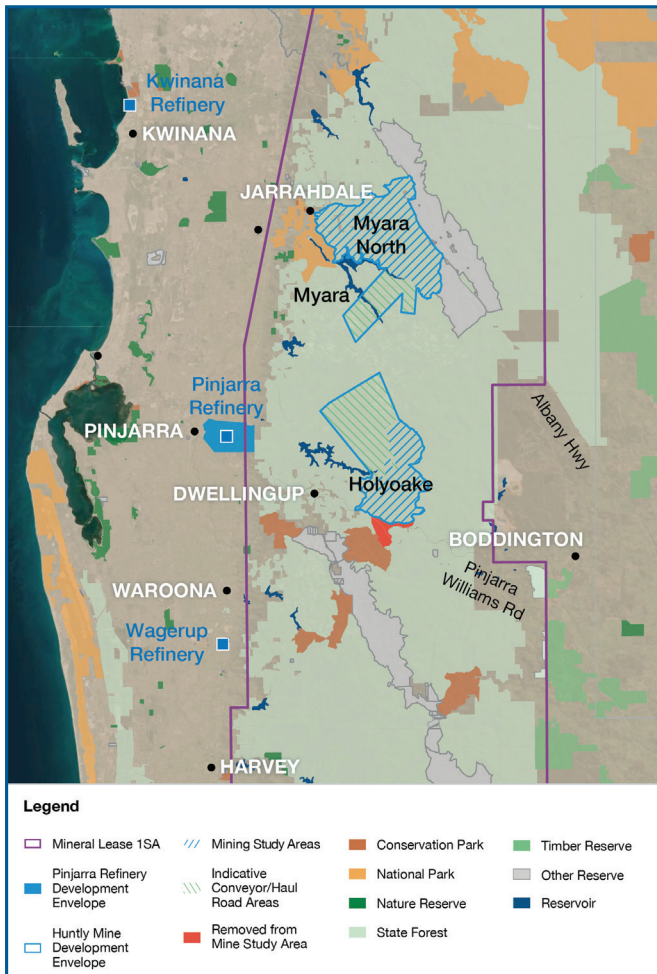


# Environmental Assessment

## Huntly Bauxite Mine & Pinjarra Alumina Refinery



### Overview

#### Who we are

Alcoa Australia has been operating as an integrated bauxite miner and alumina producer in the south-west of Western Australia since 1963. Our bauxite mines (Huntly, Willowdale) and alumina refineries (Kwinana, Pinjarra, Wagerup) are among the world's best operations of their kind and add considerable value to the nation, state, and local economies. Our operations produce about 45% of Australia's alumina, the feedstock for aluminium. We value our place in the communities where we operate and where we directly employ around 4,000 people.

#### The Project

As part of our desire to keep adding value and meet contemporary expectations, we are seeking to modernise the environmental approvals of our Huntly Bauxite Mine and Pinjarra Alumina Refinery. This environmental approval project has three components that will require State and/or Commonwealth assessment and approval. These components are:

**Mine:** transition the Huntly Mine to the proposed Myara North and Holyoake mine regions within ML1SA (inclusive of bauxite for the Pinjarra Alumina Refinery and the Kwinana Alumina Refinery);

**Refinery:** increase production at the Pinjarra Alumina Refinery by 5 per cent from 5.0 million tonnes per annum (Mtpa) to 5.25 Mtpa including development of water storage ponds and associated borrow pits; and

**Export:** increase the rate of mining at the Huntly Mine to supply up to 2.5 Mtpa of bauxite for export.

This requires total clearing within the Huntly Mine Development Envelope of 9,273 hectares and will support operations at Pinjarra and Kwinana refineries for approximately 10 years.

### About the Project's components

#### Huntly mine

Huntly currently mines about 27 Mtpa of bauxite with 100% supplied to the Pinjarra and Kwinana refineries.

Bauxite forms in shallow pods, which means a constantly moving mining footprint followed by progressive rehabilitation. Studies are undertaken prior to mining to identify, and where appropriate, protect important environmental, cultural and social values.

Less than a quarter of the Myara North and Holyoake mine and transport study areas would be cleared under our proposal. This would produce enough bauxite to enable Pinjarra and Kwinana refineries to continue to operate for about 10 years along with a small amount for ongoing export, should this be pursued in the future. Under current plans, the proposed next mining areas would operate from between around 2025-2035.

#### Pinjarra refinery

Pinjarra refinery currently produces about 4.7 Mtpa of alumina and has approval to produce up to 5 Mtpa.

Production is expected to reach 5 Mtpa in coming years due to efficiency and operational improvements. Approval to produce up to 5.25 Mtpa would enable continued improvements.

Approval is also being sought for the development of water storage ponds and associated borrow pits.

#### Bauxite export

Alcoa completed a trial in December 2021 to export up to 2.5 Mtpa of bauxite.

Currently Alcoa requires 100% of the bauxite produced at Huntly Mine to supply Pinjarra and Kwinana refineries.

Approval would give us the option to export up to 2.5 Mtpa of the total WA bauxite produced annually, should operational priorities change.



## Assessment process

The project will be assessed by the State and Commonwealth regulators in accordance with:








- Environmental Protection Authority (EPA) (State) Environmental Protection Act 1986; and
- Department of Climate Change, Energy, the Environment and Water (Commonwealth) Environment Protection and Biodiversity Conservation Act 1999.

The level of assessment has been set at the highest level being Public Environmental Review and the Commonwealth assessment will run in parallel with the State under one process to be led by the EPA. As part of the approvals process the public will have an opportunity to provide comment on the Environmental Review Document (ERD) that Alcoa will submit as part of the process.

## Preparing for assessment

To inform our ERD and understand potential impacts of the project, Alcoa has completed extensive studies into the seven environmental factors outlined below.

In 2023 we will undertake additional work across some of these study areas for inclusion in our ERD. This work has been requested by the EPA through an addendum to our Environmental Scoping Document.

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**Terrestrial Fauna**  
 Fauna studies for new mine areas including for threatened species such as black cockatoos and chuditch.
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**Terrestrial Environment Quality**  
 Terrestrial quality studies for new mine areas to protect the environmental values of the soil.
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**Surface and Groundwater**  
 Hydrological and water quality assessment in new mine areas and assessment of future water requirements for the refinery.
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**Social Surrounds**  
 Noise management, Aboriginal and European cultural heritage surveys, recreational tracks and trails.
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**Flora and Vegetation**  
 Vegetation surveys for new mine areas including conservation-significant flora.
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**Air Quality**  
 Emissions to the atmosphere including dust and an updated refinery health risk assessment.
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**Greenhouse Gas Emissions**  
 Potential impacts from mining and refinery production increase and identifying emission reduction opportunities.

## Assessment timeline

The EPA recently updated the Indicative Assessment Timeline to enable Alcoa to complete additional work for its ERD. The public comment period will commence Q3 2023 and run for 10 weeks.

