Huntly mine transition and Pinjarra refinery production increase

Environmental assessment

Social surroundings (amenity)

Alcoa has been operating in Western Australia since 1963. Our Huntly and Willowdale mines send mined bauxite to our Pinjarra and Wagerup refineries where it's refined into alumina, the material used to make aluminium.

Aluminium plays a key role in decarbonisation. It's found in solar panels, wind turbines, electric vehicles, medical equipment and more. We continue to rely on it every day.

The assessment

We are seeking approval to transition Huntly Bauxite Mine to new operating areas and increase alumina production at Pinjarra Alumina Refinery by 5%. This requires assessment by the Environmental Protection Authority (EPA) and approval by the State and Commonwealth Government to ensure it meets environmental standards and minimises impacts to the environment, cultural values and local communities.

Transitioning to new mine regions is essential for the continued operation of the Huntly mine and Pinjarra refinery. This project will protect thousands of ongoing local jobs, helping sustain the regional economy.

Alcoa's focus is on preserving community enjoyment and experiences in the local area. We conduct assessments to evaluate noise, dust, and visual impacts on recreation areas, tracks, trails and communities.

EPA environmental objective aims to

maintain community well-being by managing noise, visual impacts, and access to recreational areas.

Key terms

Social surroundings (amenity) – The aesthetic, economic, and social qualities of an area that contribute to community amenity, including noise levels, visual appeal, and access to recreational spaces.

Proposed activities

Alcoa's proposed activities that could impact social surroundings (amenity) include:

- Clearing native vegetation.
- Construction, mining, refining and operational activities.
- Physical presence of infrastructure.
- Rehabilitation activities.

Potential impacts

Mining and refining activities have the potential to impact social surroundings (amenity) in several ways, including:

Noise – Construction and operations generate noise, which could affect nearby residents and visitors to public spaces and recreational areas.

Visual – Changes to the landscape, including clearing, infrastructure, lighting, and dust may alter the visual character and sense of place.

Recreational use – Public access to trails and other spaces may be impacted by noise, dust, traffic, or temporary closures.

Managing impacts

Alcoa manages potential impacts on social surroundings (amenity) through the application of the mitigation hierarchy – avoidance, minimisation and rehabilitation. We developed a Recreational Trails and Facilities Management Plan in consultation with stakeholders to assess and manage public access impacts.

Avoid

- No clearing or disturbance in mapped high-conservation areas, including old growth forests, national parks, and recreation reserves.
- Preserve the Italian Prisoner of War (POW) Camp, ensuring no direct or indirect impacts.
- Avoid direct impacts to forest monitoring areas, including Kennedy Forestcheck and Wungong Catchment Trial scientific sites.

Minimise

- Limit noise impacts by establishing noise sensitivity zones and restricting nighttime operations near White Horse Hills Campsite.
- Restrict night operations to mining, ore haulage, and mine facilities, with blasting and rehabilitation limited to daytime.
- Maintain at least 100m of vegetation screening to reduce visual impacts from roads and recreational sites.
- Design infrastructure using materials that blend with the natural environment.
- Protect recreational areas, ensuring continued access to the Italian Prisoner of War (POW) Camp over the life of the mine and minimising disruption to trails and facilities.
- Maintain a 650m buffer between blasting areas and nearby trails, campsites and residents, using alternative rock fragmentation where required.
- Reduce dust emissions by sealing roads and using water carts within the mine site.
- Position lighting to minimise effects on nearby communities and recreational areas.
- Reduce existing noise levels from refinery by replacing equipment with newer and quieter versions.

Rehabilitate

Alcoa invests significantly to rehabilitate the areas where we operate, ensuring we are returning healthy, self-sustaining jarrah forest when mining ends.

- Rehabilitation rates will match the clearing undertaken for mining and short-term infrastructure on a rolling 3-year basis.
- Rehabilitating cleared areas by reshaping excavated land to blend with the surrounding unmined forest.
- Prioritising rehabilitation near communities and recreational areas.

How Alcoa monitors potential impacts to social surroundings (amenity)

Noise monitoring

Implement noise monitoring, predictive modelling, and mitigation measures through an Integrated Noise Management System to track and manage noise levels.

Dust monitoring

Implement a dust monitoring network to include monitoring of dust emissions sources such as bauxite stockpiles as well as ambient air quality.

Integrate this with other data sources, such as weather, to create predictive modelling of dust emissions and maintain compliance.

Monitoring of dust emissions against National Environmental Protection (Ambient Air Quality) Measure.

Regulatory oversight

Monitoring reports demonstrating compliance with relevant environmental approvals.

Stay informed. Scan the QR code using your phone camera, visit our website www.alcoa.com/australia or contact us via alcoaofaustralia@alcoa.com or (08) 9316 5817.
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