AURUKUN BAUXITE

GLENCORE

About our EIS (Environmental Impact Statement)



The Aurukun Bauxite Project is seeking approval to build a new bauxite mine 30 kilometres north of Aurukun on Cape York in Far North Queensland. It would be located on the land of the Wik Waya People.

The Aurukun Bauxite Project is owned 70% by Glencore and 30% by Mitsubishi Development, and is managed by Glencore, one of the world's largest diversified natural resource companies.

Australia is one of the world's biggest producers of bauxite, the raw material used to produce aluminium. Aluminium plays an important role in modern life and is used to produce things like solar panels, electric cars and drink cans.

ABOUT THE PROJECT

The expected life of the proposed bauxite mine is over 20 years, with around eight million tonnes of bauxite produced each year for sale and export.

Bauxite is mined in shallow open cut pits, with no blasting needed. The raw bauxite is then screened and washed with water in a processing plant to remove impurities and produce bauxite for sale. The processed bauxite would be transported by road-trains along the Bauxite Transport Corridor to the coast, around 15 kilometres west of the mining area. This private haul road would need to cross Rio Tinto's Amrun mine lease to reach the coast.

At the coast, the bauxite would be loaded onto a purpose-built, fully-enclosed vessel for transfer to a bulk carrier anchored about 18 kilometres offshore.

PROJECT APPROVAL PROCESS

There are several approvals required before the project can proceed. The Environmental Impact Statement (EIS) is part of the process to gain environmental approval from the government. Other approvals are also needed from Traditional Owners, landowners and other government departments. We also need support from customers and both Joint Venture partners before the mine can proceed.





Scan the QR Codes to **listen to each page** of this fact sheet being read out.





WHAT IS AN EIS?

An EIS describes the potential environmental impacts of a proposed activity as well as how those impacts can be avoided or minimised. It also describes how environmental impacts will be managed and monitored if the project receives approval. Preparing an EIS involves a large number of scientists and technical specialists undertaking studies over a number of years.

THE AURUKUN BAUXITE PROJECT EIS

The EIS process for the Aurukun Bauxite Project started with baseline data collection in 2017 and continued over a number of years and during different seasons. Technical reports were then prepared by specialists for review and discussion with government agencies. These reports were used to prepare the EIS.

The EIS is an extensive document which contains 27 chapters, including:

- Mine rehabilitation and closure
- Surface and ground water
- Terrestrial, aquatic and marine ecology
- Matters of national environmental significance
- Socio-economics and cultural heritage
- Transport
- Environmental management and commitments.

This brochure summarises some of the key issues identified during the process and describes how you can find out more information or ask us a question. There is also information on how you can make a submission to the Queensland Government.





A FOCUS ON CONSULTATION

Our first consultation with the Aurukun community took place in 2013. Since then, regular, extensive consultation has been part of both our broader community engagement program and the EIS process.

The EIS would not have been possible without the support of the Aurukun community, Traditional Owners, and the local workforce who participated in our field survey work. As part of the EIS preparation, Traditional Owners were also consulted about the elements that were most important to them. An independent consultant was engaged in 2020 to review and provide information about priority areas in the draft EIS like rehabilitation, marine ecology, cultural heritage and project commitments.

Traditional Owners were then able to provide important feedback which has informed key parts of the EIS. Working with Traditional Owners is a critical part of building an informed consent that can support project development and operation.

AGREEMENT MAKING PROCESS

The agreement-making process with Traditional Owners began in 2019 and is the foundation of a strong relationship. During the process, discussions have centred around the aspirations of Traditional Owners, cultural heritage and environmental management, economic opportunities and benefits, and access to country.

Search for *Consultation Updates* at <u>aurukunbauxite.com.au</u> to find out more.



WORKING TO AVOID IMPACTS

We try to avoid impacts on the surrounding environment wherever possible.

As part of the Project design we have:

- Avoided disturbance to areas that Traditional Owners identified as being culturally significant.
- Designed a coastal loading facility and transhipment vessel that does not require dredging and avoids sensitive marine features.
- Established habitat buffer zones, up to one kilometre wide, along watercourses to avoid impacts on potential habitat for threatened species.
- Designed a water storage dam that will allow wet season flows to continue downstream into Tapplebang Creek and the Ward River.
- Included a fishway in our dam design to maintain fish movements in Tapplebang Creek.

Where impacts cannot be avoided we work to manage and minimise the effect of our activities as well as closely monitor the environment around us.

SOCIAL IMPACTS AND OPPORTUNITIES (SECT. 16)

A Social Impact Assessment covering Aurukun and the nearby towns of Weipa and Napranum is included as part of the EIS.

The assessment recognises that Aurukun has a strong culture of kinship, ceremony and language. There are also, like in other remote communities, barriers to workforce participation and job retention.



The EIS includes a Social Impact Management Plan (Appendix S) that describes how we propose to minimise potential social impacts and increase local opportunities. The Project would also implement other measures including a Cultural Heritage Management Plan and an agreement with Traditional Owners.

LOCAL WORKFORCE OPPORTUNITIES

During operations, a total workforce of between 350–400 people is expected. The Project is committed to maximising opportunities for local workforce participation in the mine.

We have been undertaking local workforce activities in Aurukun since 2018 and have engaged many community members in work supporting the Project, including field work for the EIS.

Our long-term approach is based on:

- Building the current workforce pool in Aurukun by assisting community members to meet minimum requirements for employment.
- Supporting community members in developing our pillars of employability – Teamwork, Reliability and Fitness for Work.
- Targeting specific roles that are most suited for community members and will maximise their chances of success.

Our recruitment hierarchy will prioritise workers who meet role requirements and who are recognised as Wik or Wik Way People or are culturally accepted residents of Aurukun.



PUBLIC EXHIBITION AND SUBMISSIONS

The EIS is open for public consultation from 11 September 2023 until 13 November 2023. During this period, anyone can make a submission about the EIS to the Queensland Department of Environment and Science (DES). Scan the QR code for more information on this process or search *Aurukun Bauxite* on the DES website: www.des.qld.gov.au



CULTURAL HERITAGE (SECT. 18)

A Cultural Heritage Management Plan is being developed directly with Traditional Owners and their advisors. After endorsement, the plan would require approval under the Queensland *Aboriginal Cultural Heritage Act 2003*.

Cultural heritage work began on country with Traditional Owners in 2017 and the feedback received has informed the Project design to reduce potential impacts.

Management measures have been developed in consultation with Traditional Owners for protecting important cultural heritage including reef systems, story places and artefacts.

ACCESS TO COUNTRY (SECT. 19)

Maintaining access to country is important for Traditional Owners. The Project will not restrict access to important locations outside the Project site like the Amban or Waterfall outstations.

The Project is also committed to establishing an agreed Land Access Plan with Traditional Owners which would include any necessary restrictions (e.g. for safety reasons in operational areas) as well as ways to improve access to country (e.g. with road maintenance).

WATER SUPPLY OPTIONS (SECT. 4)

We will need around 10 gigalitres of fresh water each year to wash and screen the raw bauxite.

We considered several potential water sources including groundwater, nearby rivers and creeks and even treated seawater. After a detailed assessment (described in the EIS) we determined that the only feasible option would be a dam on Tapplebang Creek.

TAPPLEBANG DAM (SECT. 7)

Tapplebang Creek is a narrow watercourse that runs through the Project site and feeds into the Ward



River. Tapplebang Creek flows for about six months per year, mainly during the wet season.

The dam on Tapplebang Creek would operate as a weir with excess water allowed to overflow via a spillway. Given the normal wet season rainfall in Cape York, no noticeable change in the flow of the Ward River is predicted.

While Tapplebang Creek does not normally flow in the dry season, if the dam receives water during this time, some of that water will be released downstream to avoid causing extended dry periods.

WATER MANAGEMENT (SECT. 7)

The EIS includes studies of the surface and groundwater in the Project area which is largely undisturbed.

The Project avoids or minimises impacts on water by:

- Keeping clean water on the site separate to mine affected or sediment affected water.
- Capturing and treating any water from industrial areas of the site such as workshops and fuel storage areas.
- Maximising the use of mine affected water for dust suppression or bauxite processing.
- Establishing habitat buffer zones up to one kilometre wide along the creeks.
- Locating open cut pits outside the one in 1,000-year flood zone for the creeks.
- Using the available on-site water storage in exhausted open cut pits to minimise the potential for release of mine water to the environment.
- Using sediment controls in disturbed areas to collect any suspended sediment before water is allowed to release from the site.

Any release of water from the mine site would only occur after significant rainfall and where water storage capacity on site was exceeded. In these



conditions any water that overflows from the site would only be a small amount compared to the volume of water that would be already flowing in the creeks from the surrounding areas.

Water on the Project site will be closely monitored as a requirement of our Environmental Authority.

COASTAL IMPACTS (SECT. 10)

To export the bauxite, a loading facility would be built on the coast around two kilometres south of Norman Creek. A covered conveyor on a 450-metrelong jetty would be used to load a fully-enclosed transhipment vessel for transfer to a bulk carrier offshore.

The transhipment vessel would be more than 150 metres long but its shallow draft would allow it to operate without dredging or tugboats, making two return trips per day to the bulk carrier.

A port area would be declared around the facility with a small exclusion zone required for safety while the vessel is operating.

As there is no dredged shipping channel required for the transhipment vessel, other vessels can continue to use the waters around the port with normal maritime rules applying.

The location avoids direct impacts on coastal vegetation and significant marine habitats such as reefs or seagrass, and the vessel route avoids nearby reefs that are culturally significant.

The facility and operations are designed to avoid spillage of bauxite with no other materials (such as fuel) passing through the facility. No significant noise impacts (above or below water) are predicted during the short construction period. Lighting at the facility is also designed to minimise any impacts to nesting turtles although there is low density of nesting activity in the region.

THREATENED SPECIES AND BIODIVERSITY OFFSETS (SECT. 11)

The EIS includes studies assessing whether threatened plant and animal species are present or likely to occur in the study area and might be significantly affected.

The studies found:

- More than 98% of the study area is Darwin Stringybark and Bloodwood woodland with no threatened plant species identified.
- Three threatened animal species (Red Goshawk, Palm Cockatoo and Blackfooted Tree Rat) were present.
- Two more threatened bird species (White-throated Needletail and Masked Owl) were not found during surveys but were considered likely to occur.

- One threatened aquatic species (Estuarine Crocodile) was present.
- Another threatened aquatic species (Largetooth Sawfish) was considered likely to occur in the Ward River downstream of the project site.

Additional turtle and marine species were either present or considered likely to occur in the marine study area.

Studies found the Project has the potential to have a significant impact on habitat used by four threatened species: Red Goshawk, Palm Cockatoo, Blackfooted Tree Rat and Masked Owl.

As part of the design process, we have modified the mine plan and realigned infrastructure to avoid higher value habitat for threatened species where possible. A habitat buffer zone, up to one kilometre wide, will be used to protect areas of preferred habitat along the creeks.

Where the impact on threatened species cannot be avoided or reduced, the EIS includes a draft Biodiversity Offset Management Strategy (Appendix Q). This strategy involves protecting a larger area of similar land and improving the quality of habitat in that area for any threatened species affected by the Project.

The offset strategy and proposed land management activities provide an additional opportunity to work with Traditional Owners in land management.

REHABILITATION

At Glencore, planning for mine closure and rehabilitation starts well before any mining activities begin. All operations must develop and implement closure plans, including progressive rehabilitation, that meet our own standards and international guidelines.

A draft Progressive Rehabilitation and Closure Plan is included in the EIS. For the majority of the Project site, we propose to return the land to native vegetation by:

- Establishing a final landform with stable and gentle slopes similar to the natural landscape.
- Ensuring water can drain freely from the site without additional erosion.
- Placing topsoil back on disturbed areas and re-vegetating with grass and native trees and shrubs.

During the process of mine closure some roads are expected to be retained for the Traditional Owners, however all buildings and mine infrastructure will be removed unless otherwise agreed. Tapplebang Dam will be decommissioned, and the dam wall would be removed.

INDUSTRY LEADER

When it comes to mine closures and rehabilitation, Glencore is an industry leader in Australia. Every year for the last six years, our coal business has rehabilitated the equivalent of 1,400 football fields' worth of mined land across Australia and transformed it back into selfsustaining native bushland, farmland or other suitable use.



CASE STUDY: GLENCORE COAL IN AUSTRALIA

Baal Bone Colliery near Lithgow in New South Wales ceased operation in 2011 and rehabilitation activities were completed in April 2022. More than 100 hectares of rehabilitated land from the site has recently been certified.





Find other rehabilitation case studies from Glencore's Australian operations by scanning the QR code or visiting our website at: www.glencore.com.au/who-we-are/ advancing-everyday-life/rehabilitation.

Where to get more information



Find out more about the Aurukun Bauxite Project at: aurukunbauxite.com.au



Access the entire EIS by scanning the QR Code or downloading it from our website here.



Have a question?

Scan the QR Code or use the link here to access our online feedback portal.