

# Worsley Mine Development

## CONTINUING OPERATIONS

The **objective** for this component of the environmental review is to **protect social surroundings from significant harm**.

Within this assessment Social Surroundings includes the aesthetic, cultural, economic and social surroundings to the extent that those surroundings directly affect or are affected by physical or biological surroundings.

## INTRODUCTION

**South32 Worsley Alumina is an integrated bauxite mining and alumina refining operation in the South West of Western Australia with a proud track record spanning more than 35 years.**

The Worsley Mine Development is the next phase of bauxite mining, providing access to future reserves and resources to sustain production at our Worsley Alumina refinery near Collie.

The project is a key enabler for Worsley Alumina to continue to deliver benefits to the Peel and South West regions, and Western Australia more broadly, for many years to come.

The project is currently subject to a State and Commonwealth environmental approvals process, with a comprehensive environmental review undertaken and an eight-week public review period.

## BACKGROUND

**The information described in this factsheet is focused on the Heritage component of the overall Social Surroundings review and should be read in conjunction with the summary information provided for Social Surroundings.**

Heritage areas identified within the Primary Assessment Area (PAA) include 11 'Registered' Aboriginal heritage sites, 140 'Other Heritage Places' (including 10 'Lodged' sites), eight European heritage sites and tourist areas including Tullis Bridge and the Bibbulmun Track.

### ABORIGINAL HERITAGE

Activities which will occur within the PAA that have the potential to disturb Aboriginal heritage sites include the development of new roads and other infrastructure, vegetation clearing, mining activities and the construction of new bridges and overpasses. Although location of the activities within the PAA are not yet fully defined, it is assumed that any future impacts or indirect impacts that result from mining activity and infrastructure work would constitute a Major Disturbance under the Aboriginal Heritage Due Diligence Guidelines (Brad Goode & Associates, 2020).

While the location of mining activities is subject to mine planning, it is known that three Aboriginal heritage sites will be impacted by the construction of the river crossings, including:

- Hotham River (ID 27935), impacted by the construction of three of the proposed river crossings;
- Mount Saddleback (Mokine) (Site ID 17214), the registered boundary intersects two of the proposed river crossings; and
- Dukatj (34 Mile) Creek (ID 21471), which has been assessed as 'Not a Site', meaning Worsley Alumina have no further obligations for this site.

The proposed river crossings will be carefully designed through consultation with Traditional Owners to minimise impacts to river flow and surface hydrology as far as practicable, with impacts primarily localised within the extent of the crossing locations. Consultation has been and will continue to be undertaken with Traditional Owners which includes incorporation of preferred crossing locations, identified by Gnaala Karla Boodja (GKB) Representatives, into the bridge crossing designs.

### EUROPEAN HERITAGE

No World Heritage Sites, Commonwealth Heritage or State Listed heritage sites have been identified within the PAA. The closest State Listed heritage site to the northern part of the PAA is the Quindanning Hotel (Ye Olde Quindanning Inne) (Place No. 16215), located approximately 2 km southeast of the Worsley Mining Development Envelope. The closest State Listed heritage site to the southern portion of the PAA is the Railway Round House with Turntable, Collie (Place No. 541), located approximately 15 km to the southeast. No World Heritage or Commonwealth Heritage sites occur within 10 km of the PAA. There are also eight heritage sites listed in the InHerit WA database within the PAA including Tullis Bridge, Tullis Mill, Camballing bridge and School site, Monday's Store site, Dwellingup-Boddington Railway line precinct and Mokine homestead.

## POTENTIAL IMPACTS

**Disturbance to Aboriginal heritage sites cannot be avoided within two 'Registered' sites ('Mount Saddleback' [Site ID 17214] and 'Hotham River' [Site ID 27935]) due to the proposed river crossings.**

Applications for consent to disturb these sites, and any additional 'Registered' sites impacted through mining activities, will be made under Section 18 of the Aboriginal Heritage Act (1972)<sup>1</sup>. The preparation and submission of any Section 18 applications (or applicable contemporary requirements at the time) will be undertaken in close consultation with the Traditional Owners. Impacts to the cultural value of the Registered sites will be minimised as far as practicable through implementation of proposed management measures, relevant Aboriginal heritage agreements and the Aboriginal Heritage Site Management procedure.

It is considered that the risk of uncovering unknown Aboriginal heritage sites can be adaptively managed on-site and liaison with Traditional Owners will be ongoing. Excavation works associated with the construction of proposed river crossings will be monitored by Traditional Owners. There is the potential for unidentified artefacts within the PAA to be uncovered during ground disturbing activities associated with the project (Brad Goode & Associates 2020a). A 'stop work' procedure will be implemented if any heritage artefacts are uncovered. The potential risks of impact to cultural heritage will be managed and mitigated in accordance with the Worsley Cultural Heritage Management Plan.

Due to the locations of the European heritage sites being known and their proximity to existing public roads, it is anticipated that they will be excluded from the disturbance footprint and any direct impact or disturbance will be avoided. No direct impacts to European heritage sites will occur without due consultation with the appropriate regulatory authority. It is considered that indirect impacts from erosion, vibration and reduced visual amenity can be adequately managed.

1. To be replaced by the Aboriginal Cultural Heritage Act 2021 (ACH Act). Before the ACH Act comes into effect there will be a transitional period of at least 12 months during which the regulations, statutory guidelines and operational policies will be developed to ensure the ACH Act will have its intended effects. During the transitional period the Aboriginal Heritage Act 1972 will remain in force to allow proponents to continue to seek Section 18 consent for any activity that will impact Aboriginal sites.

## MITIGATION

**Mitigation management plans and procedures regarding heritage have been in place and implemented at the existing Worsley Alumina mining operation for many years.**

For Aboriginal Heritage, the key document of note is the Worsley Cultural Heritage Management Plan which describes strategies and procedures to ensure Worsley Alumina continues to manage Cultural Heritage risks at all stages of the operation in accordance with the requirements of the Western Australian Aboriginal Heritage Act 1972.

In addition, the Worsley Alumina Protected Area Procedure identifies and protects areas of high heritage (Aboriginal or European) value within the operational area and applies a consistent approach to mapping, signage and recording of the area to ensure it will continue to be protected.

## PREDICTED OUTCOME

**Disturbance to Aboriginal heritage sites cannot be avoided within two 'Registered' sites ('Mount Saddleback' [Site ID 17214] and 'Hotham River' [Site ID 27935]) due to the proposed river crossings.**

Applications for consent to disturb these sites, and any additional 'Registered' sites impacted through mining activities, will be made under Section 18 of the AHA during the current transition period. The preparation and submission of any Section 18 applications will be undertaken in close consultation with the Traditional Owners. Worsley will implement the requirements of the Aboriginal Cultural Heritage Act 2021 (WA) and update the Worsley Alumina processes and practices to be aligned with the requirements of the new act once the substantive provisions of that legislation commence. No direct impacts to Aboriginal heritage or European heritage sites will occur without due consultation with the appropriate regulatory authority. It is considered that indirect impacts from erosion, vibration and reduced visual amenity can be adequately managed under existing site management procedures.

More detailed information is provided in Section 5.7 of the Environmental Review Document.