



# Alcoa of Australia

## Bauxite Mining Operations near Lane Poole Reserve

australia's aluminium

*Alcoa of Australia is the global leader in alumina production and is a leading producer of aluminium in Australia. Aluminium is produced from bauxite found in this area and is used in many products we use daily – from aluminium foil to aeroplanes.*

### MANAGEMENT OF THE JARRAH FOREST

This area of State owned jarrah forest is managed for multiple land uses. These include conservation, recreation, mining, timber production and water production. Alcoa's operations are designed to protect and restore this multiple use jarrah forest. Since mining commenced in 1963, Alcoa has cleared around 1 percent of the State's 20,000 sq km jarrah-marri forest. If Alcoa were to mine all commercial grades of bauxite in the forest, less than 5 per cent of the total jarrah forest would be mined.

### MINING OPERATIONS

Alcoa currently operates two bauxite mines in WA's Darling Range: Huntly, west of Dwellingup and Willowdale east of Waroona. Bauxite from the nearby Willowdale mine supplies the Wagerup alumina refinery.

### NOISE MANAGEMENT

Alcoa has a comprehensive noise management program which includes computer generated modelling of potential noise impacts and monitoring of actual noise levels. These are part of the day-to-day management of operations. Noise from blasting and operations is regulated under the *Environmental Protection Regulations*.

**Blasting** - Alcoa uses blasting to fracture the rock in areas it is mining. Digging up bauxite is not easy—it is buried under massive pieces of rock about the size of football fields. This is called caprock. To mine the bauxite, Alcoa breaks up the caprock by blasting.

Blasting is a process that uses explosives to cause hard caprock to crack, so it can be picked up, put into the back of a truck, taken away and turned into alumina, then aluminium.

While you are in the Lane Poole area, you may hear Alcoa blasting caprock during the day. Blasting sounds like a rumbling, low level explosion or thunder and lasts for about 10 seconds. You might hear a couple of single pilot shots first, before the main blast.

**There is nothing to be concerned about—the blast actually sounds closer than it really is.**

Each blast is monitored at public locations or neighbouring properties predicted to be the most impacted by the blast, in order to check levels from 'pilot shots' and to confirm compliance during the blast. If single 'pilot shots' are heard, it is expected that the main blast will be clearly heard.

**Operations** – From time to time, general machine noise may be heard in this area. A network of fixed noise monitors assists Alcoa to manage noise in neighbouring areas. Management of noise at Willowdale Mine is of particular importance due to close proximity of neighbours. Mining activities at Willowdale are restricted to specific areas at night and an on-site weather station provides "real time" information regarding wind direction and speed that helps manage operations to minimise noise.

### REHABILITATION

Alcoa's rehabilitation program recreates a forest capable of functioning as a complete ecosystem, that is suitable for multiple land uses. The rehabilitation techniques used are regarded as world's best practice, and they are the result of over three decades of research.

Monitoring results indicate that the biodiversity of Alcoa's rehabilitation is similar to that of the surrounding unmined forest. To date fauna monitoring has shown that 100% of mammal species, 90% of bird species and 92% of reptile species have recolonised rehabilitated areas within 10 years.

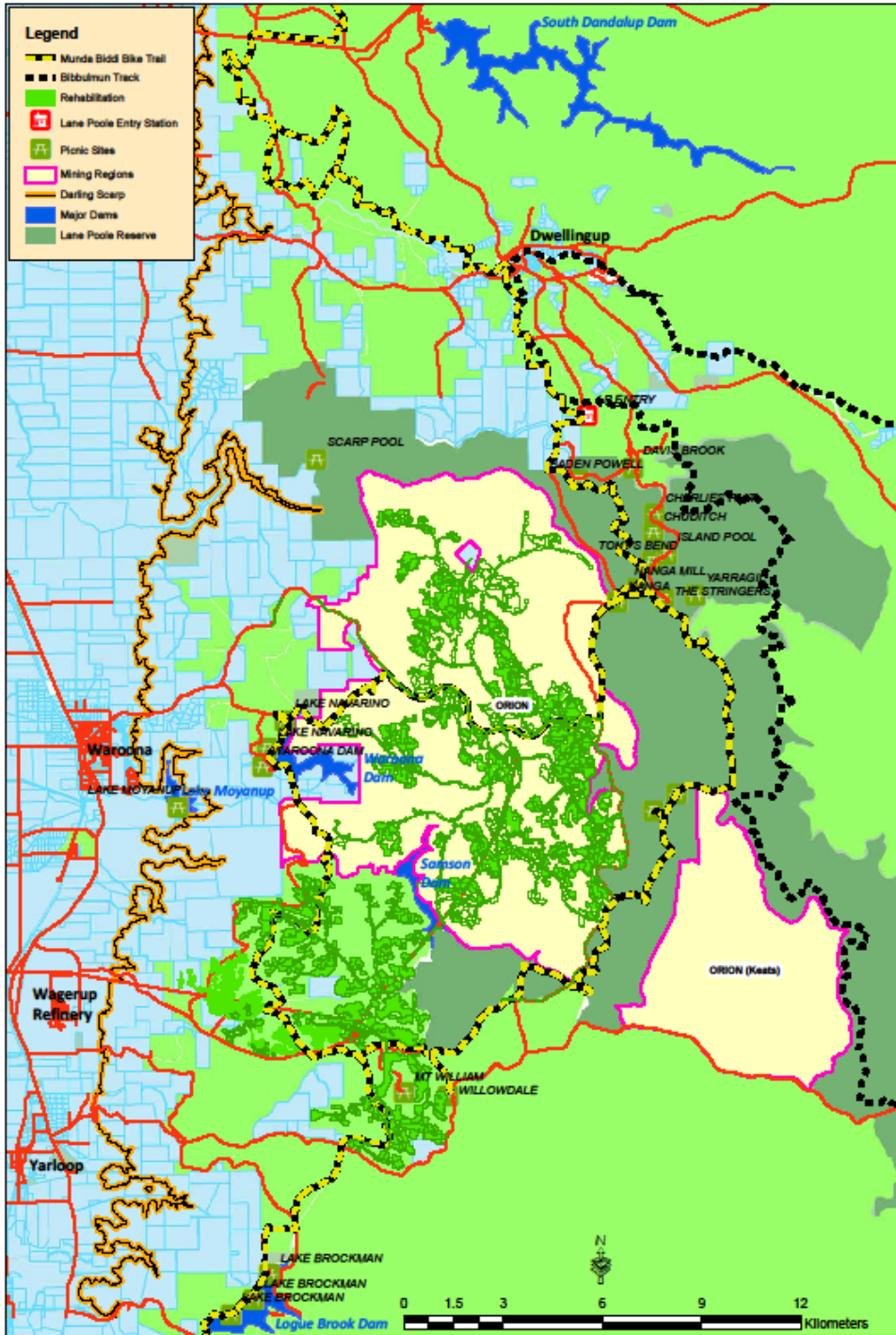
### DIEBACK

Dieback is a deadly plant disease caused by the pathogen *Phytophthora cinnamomi* which was introduced into Western Australia from Java in the early 1920s. Dieback is spread by moving moist soils and plant material. Even small amounts of soil on the underside of a vehicle can start a new outbreak of the disease. Alcoa has strict hygiene and washdown procedures to prevent the spread of this disease.



**WANT TO KNOW MORE?**  
Come on tour and see our mining operations  
Call Alcoa Discovery Centre 9530 2400  
Visit the Alcoa website [www.alcoa.com.au](http://www.alcoa.com.au)  
Call Willowdale Mine Neighbour Relations 9733 8942  
Call Willowdale Mine Security (24 hours/7days) 9733 8811





Access to areas of forest, in the tan shaded area, is restricted due to mining operations, to protect drinking water catchments and to reduce the spread of dieback disease. For your own safety and for the protection of the environment,

***PLEASE OBSERVE ALL SIGNS AND WARNINGS***



**WANT TO KNOW MORE?**  
 Come on tour and see our mining operations  
 Call Alcoa Discovery Centre 9530 2400  
 Visit the Alcoa website [www.alcoa.com.au](http://www.alcoa.com.au)  
 Call Willowdale Mine Neighbour Relations 9733 8942  
 Call Willowdale Mine Security (24 hours/7days) 9733 8811

