

To Whom it May Concern,

Please accept this letter in support of Petition #168 against the expansion of the Pinjarra refinery and the associated bauxite mining of Myara North and Holyoake within the Darling Ranges.

Alcoa operates under a State Agreement act approved in 1961, which includes an environmental protection exemption license. This act is outdated and does not reflect the expectations and environmental awareness of society and the conditions we now live in.

The expansion of the Huntley mine is proposed to continue through one of the thirty-six remaining biodiversity hot spots throughout the world, the Northern Jarrah Forests. The ongoing destruction of the forest will severely affect the local communities, the native flora and fauna, and the water catchment areas of wetlands and reservoirs providing water for Perth and the gold fields.

The proposed mine expansion will affect the local communities from Jarrahdale, through Serpentine, and continuing south to Dwellingup. These locations are known for their pristine environment and are the destination for many tourists and locals for holidays or outdoor recreation, including hiking, cycling and water sports. In the Peel region tourism and hospitality provide employment to 30% of the population, whereas Alcoa provides only 3%, (and 0.16% of Western Australians) and no new positions are being created by the expansion. The importance of the tourism and hospitality industries should take priority over the ill perceived benefits of bauxite mining. Especially as once the proposed bauxite mining is completed in 25 years there will be no jobs and the forest will be decimated taking with it the tourism and hospitality industries. Tourism and hospitality have significant potential for growth and longevity, but this is dependent on preservation of the forest's beauty, the waterways and the animals that live there.

Residents live in these regions for the unspoilt environment and this will be taken from them. Mining is proposed to come within 5km of towns and some outlying residents will be forced to live within the mining envelope. The peace will be disturbed daily by blasts as loud as thunder and depending on the magnitude and distance away structures shake causing cracks in the foundations, walls, and ceilings of homes. The blasting and transport of the bauxite causes an increase of toxic dust, including respirable silica. To date no studies have been undertaken by either the government or Alcoa on the long-term health effects of the exposure to the community. Whereas there are many procedures in place to protect and monitor the health of Alcoa employees exposed to the dust.

The Pinjarra refinery is located within 5km of residents, and Alcoa wish to increase production of Alumina from 5Mtpa (Million tonnes per annum) to 5.25Mtpa. Residents report nose bleeds and bad smells coming from the refinery. The impacts on people's health is cause for concern and the risks of multiple chemical sensitivity has not been investigated by either the government or Alcoa. Alcoa's own report to the National Pollutant Inventory for the year of 2017/ 2018 lists massive airborne emissions of 30 toxic and carcinogenic compounds including 31,000kg of formaldehyde, 740kg of Mercury, 68kg of arsenic, 1.1million kilograms of nitrogen oxides, 150,000kg of Volatile organic compounds, 66kg of Lead and 1.5 million kilograms of carbon monoxide. While stored toxic tailings include 200,000kg of arsenic, 250,000kg of lead and lead compounds and 330kg of mercury and mercury compounds. This residue toxic sludge is so caustic that it can never have a use again and the tailings are forming mountains of waste around the Pinjarra refinery. WA bauxite is low grade, but companies pay low royalties, for every 1 tonne of Alumina processed there are 2 tonnes of waste. One tonne of Alumina is refined into 500kg of aluminium. The production of Alumina is greedy for water, energy, and natural resources. While devastating the environment with clear felling of the forest and polluting spills of caustic liquids and hydrocarbons (hydraulic oil/ fuel) occur. The Pinjarra refinery is surrounded by multiple river systems, that all empty into Mandurah's estuary. This is unacceptable especially as Aluminium is indefinitely recyclable which uses 5% of the energy required to mine it.

The Mining lease ML1SA was approved in the 1970's, with a mining location defined to cover 7,129 square kilometres (712900ha) across Darling Plateau and extends from east of Perth to east of Bunbury. The jarrah forest located exclusively within the South West of WA is declared as a global and national biodiversity hotspot. There are over 2000 species of flora and fauna within these forests which includes multiple threatened or endangered fauna species such as three species of black cockatoo, chuditch, woylie, and mainland quokka and eleven species of endangered flora including native orchids. The current proposal will see 6700ha of native vegetation cleared within a mining envelope of 42000ha. Extensive areas of the southwest, including significant areas (>24,000km<sup>2</sup>) of jarrah forest in the Darling Range now have bauxite mining tenements over them. The Chuditch have disappeared from approximately 95% of their former range. The current distribution of the surviving subspecies of woylie (*B. p. ogilbyi*), is concentrated in south west Western Australia, were the expansion is proposed. The long-term survival of Carnaby's cockatoos depends on the availability of suitable woodland breeding habitat with tree hollows, and foraging habitat capable of providing enough food to sustain the population. Approximately 87% (525,732 ha) of potential Carnaby's cockatoo habitat has been cleared. All the flora, potential nesting and feeding trees will be obliterated with the clear fell practice of the proposed mine. Despite conservation efforts the numbers are still not increasing, and decline is considered likely to continue if significant measures are not enforced.

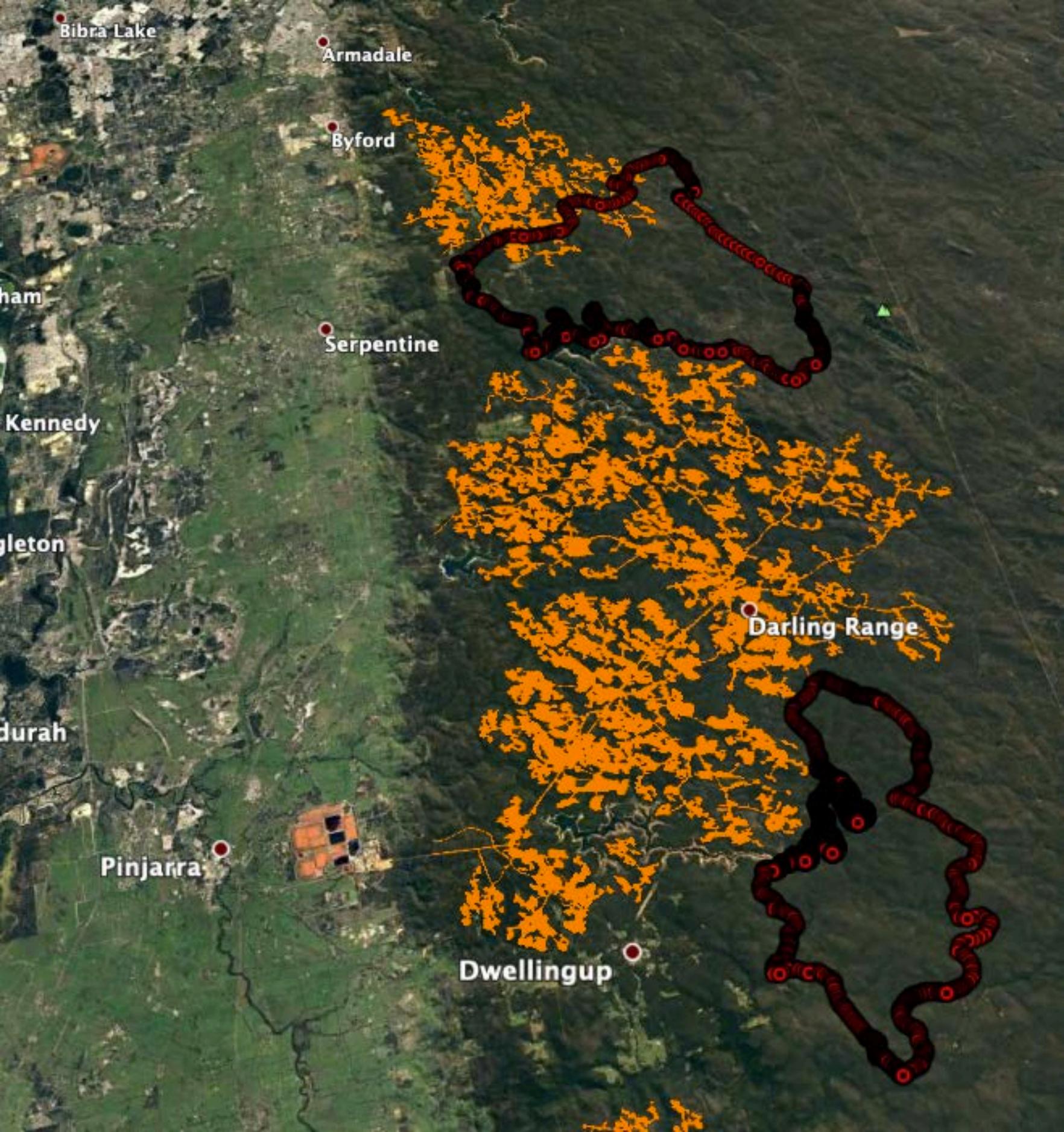
The rate of clearing of the proposed expansion is increasing rapidly going up by 50%. The fauna is left with islands of forest surrounded by mining, realistically uninhabitable due to fragmentation, noise disturbances and a dramatic increase of human activity, seriously risking the extinction of vulnerable species. Alcoa boast a 100% rehabilitation of mined areas, but what this means is that sometimes, not every year they achieve a 100% regrowth of the species they have chosen to return. This consists of only 15 species of seedlings and 50 species of seeds, nothing close to what previously existed within the area. The rehabilitated areas growth is stunted as the topsoil is depleted and protection of larger flora is completely absent. There is no ongoing watering or care provided for these plants as they struggle to take hold, many dying. The forest requires hundreds of years before it can support the fauna that now inhabits it, especially the fauna that relies on tree hollows for shelter and breeding.

The Huntley mine currently envelopes an area of over 63,000ha located within the water catchment area of three essential reservoirs. Extending through water catchment areas from the southern aspect of the Serpentine dam, around the entirety of the North Dandalup dam and to the northern aspect of the South Dandalup dam. The next proposed expansion will see the entire catchment area north of Serpentine dam and south of South Dandalup dam mined destroying the natural hydrology of the landscape permanently disrupting many tributaries that feed into these reservoirs. The Peel Harvey estuary is an internationally recognised Ramsar Wetland, which includes migratory bird habitat protected under the EPBC Act. This will be adversely affected by the cumulative impact of mining within the Peel Harvey Catchment Area which is included in the proposed Alcoa mining expansion.

In today's drying climate preserving the catchment areas of our reservoirs would seem paramount to Western Australians. This is further compounded by the loss of the forest; Jarrah is proven to continuously transpire water droplets into the atmosphere and one third of the reduction in the rain fall in the south west can be attributed to deforestation. On top of this the refinery alone is licensed to remove more than 10 Million tonnes per annum of water from various ground and surface water sources.

The proposed expansion of Alcoa's mines needs to be denied before environmental and social impacts are so devastating that they cannot be reversed.

(Please see the attached map showing the historic, and current areas mined (orange areas) and the proposed are outlined in black).



Bibra Lake

Armadale

Byford

Serpentine

Darling Range

Dwellingup

Pinjarra

ham

Kennedy

gleton

durah