

**Wagerup Vegetation Clearing  
Lot 700**

**Area 1**  
Approximately 3 ha area, plus 16 individual trees  
Required for Bushfire Protection Zone and mobile  
equipment safety

**Area 2**  
Residue Road overpass.  
Required for road safety  
by Main Roads Department  
Approximately 0.05 ha

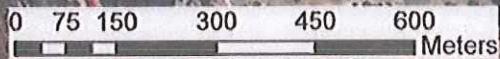
**Area 3**  
Area between train tracks  
and sand to lake pipeline corridor.  
Required for infrastructure protection.  
0.6ha approximately.

**Area 4**  
Cooling Water Return pipeline  
maintenance corridor.  
Required for infrastructure protection.  
Approximately 0.01 ha

**Area 5**  
Fuel Farm  
Required for Bushfire Protection Zone  
Approximately 0.6ha

**Area 6**  
Caustic Unloading embankment  
Required for Bushfire Protection Zone  
Approximately 0.06 ha

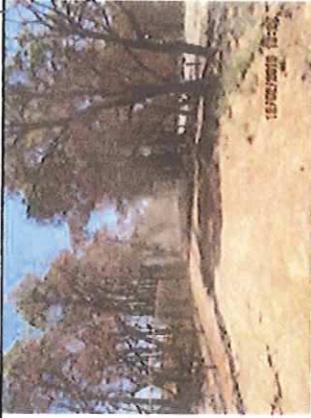

**Area 7**  
Refinery southern boundary  
Approximately 2.9ha  
Required for Bushfire Protection Zone







### Clearing at Alcoa Wagerup Refinery post Waroona/Yarloop fires (January 2016)



Since the Waroona/Yarloop fire in January 2016 Wagerup Refinery has conducted a review of the vegetation growing near the perimeter of the industrial footprint and identified several areas that pose significant fire hazard risks to refinery infrastructure. Improved separation of the native and planted native species growing within the refinery industrial zone from neighbouring bushlands is required to create Bushfire Prevention Zones (BPZ) so as to manage and reduce fuel loads and increase building/infrastructure protection in the event of a bushfire.


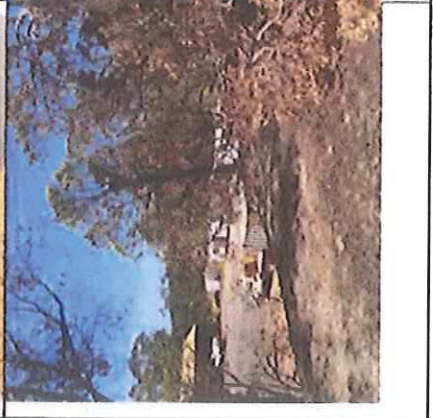
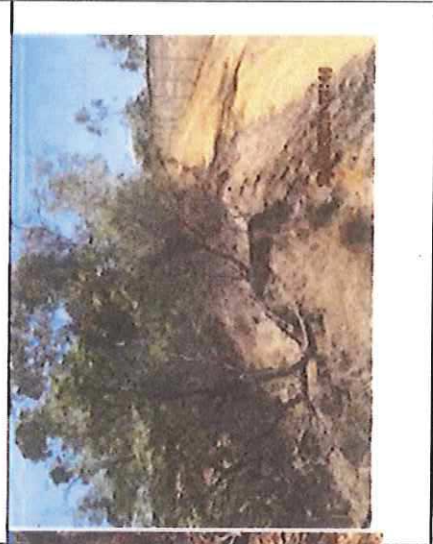
The total area required to be cleared is approximately 8 ha. The attached aerial photo shows the area locations and the table below provides the detail of the areas where clearing is required.

Areas to be Cleared				
Area	Appro x. size	Photo	Description	Reason
1 – Bauxite stockpile area	3 ha		Native vegetation. <i>marginata</i> over mixed shrub species on Alcoa land adjacent the old Willowdale Road. Located between the refinery Access Road and South West Hwy	Bushfire risk management. Create and maintain a cleared area of land to increase asset protection and employee safety as the vegetation is very close to the bauxite stockpile infrastructure and access track.
1- cont'd Bauxite stockpile – paddocks trees	0.16ha		Vegetation consists of 16 individual jarrah trees in a cleared buffer strip.	Bushfire risk management. Create and maintain a cleared area of land on the northern side of the bauxite stockpile infrastructure including an access track.

<p>2 – Alcoa's Residue Road overpass on South West Highway Wagerup.</p>	<p>0.05ha</p>		<p>Regrowth native vegetation consisting of jarrah and marri</p>	<p>Main Roads Department has advised that Alcoa is responsible for maintaining the 10m safety clearance from the base structure and approach ramps of the overpass.</p>
<p>3 - Dangerous goods pipeline - Between Sand to Line and rail line (western boundary)</p>	<p>0.6ha</p>		<p>Native vegetation <i>E. marginata C. calophylla</i> Adjacent to a remnant bushland. Historically this area was grazed as part of a farming operation until the refinery was built. It was not cleared when the refinery was built.</p>	<p>Increase the pipeline corridor to allow better access to undertake maintenance by creating an inspection access track either side of the pipelines.</p>

<p>3 cont'd - Between Sand to Line and rail line (western boundary)</p>	<p>Individual tree</p>		<p>1 marri</p>	<p>As above</p>
<p>4 - Cooling Water Return pipeline</p>	<p>0.01ha</p>		<p>Small area of very degraded native vegetation consisting of <i>B. attenuata</i> and <i>E.marginata</i> over weeds. No understory species present. There are significant attenuata deaths in the area both historical and new.</p>	<p>Establishment of a pipeline corridor to allow the underground pipelines to be maintained. This dangerous Goods pipeline is due for inspection in 2016.</p>

<p>5 – Wagerup refinery Fuel Farm</p>	<p>0.6ha</p>		<p>This area was planted in the mid 90's as part of the refinery's internal visual amenity program to improve workplace aesthetics. The vegetation includes; <i>A. flexuosa</i>, <i>A. Saligna</i> and <i>C. calophylla</i> over weeds.</p>	<p>Creation of BPZ around the refinery fuel farm. Propose to remove vegetation 2 - 3m from the top of the embankment down and all vegetation growing within 10 meters of the tank fence line.</p>
<p>6 – Caustic unloading</p>	<p>0.06ha</p>		<p>Planted and self-sown natives consisting of mainly jarrah on an embankment adjacent remnant parklands. Native vegetation historically this area was grazed as part of a farming operation. It was not cleared when the refinery was built.</p>	<p>To re-establish the road drain and embankment.</p>

<p>7 – Refinery southern boundary</p>	<p>2.9 ha</p>		<p>Native vegetation consisting of <i>E. marginata</i> and <i>C. calophylla</i> parklands. Historically the area was grazed as part of a farming operation. While the vegetation within this area is within the buffer to the known TEC, the vegetation under application is significantly degraded, containing no original understorey or community infrastructure. When the refinery was built it wasn't cleared. Eastern boundary consists of mainly planted species but there are some self sown native species including <i>A.saligna</i>.</p>	<p>Bushfire risk management. Create and maintain a cleared area of land to increase asset protection and employee safety as the close proximity of the neighbouring reserve significantly increases the fire hazard risk to refinery and contractor infrastructure.</p>
<p>7 – Refinery southern boundary cont'd - photos showing vegetation type and how close the vegetation is to infrastructure</p>	<p>Incl'd above</p>			<p>Remove vegetation from the embankment for Bushfire risk management. Create and maintain a cleared area of land to increase asset protection and employee safety.</p>