

ALCOA — BAUXITE MINING OPERATIONS

1098. **Hon Robin Chapple to the minister representing the Minister for State Development, Jobs and Trade:**

With respect to Alcoa in Australia, its subsidiaries and associated companies, and their bauxite mining operations in Western Australia, I ask:

- (a) how many tenements are held by each company by type, number and hectare size;
- (b) how many hectares have been mined in each of the last five years;
- (c) how many hectares will be mined each year when the company expands to its full approved rate of production;
- (d) what is the total area mined to date;
- (e) how much of the total area mined required the clearing of native forest;
- (f) how many hectares have been rehabilitated to date;
- (g) how much of this area has been rehabilitated with jarrah forest species;
- (h) what is the current annual production of:
 - (i) bauxite; and
 - (ii) alumina;
- (i) when the company expands to its full approved rate of production, what will be the annual production of:
 - (i) bauxite; and
 - (ii) alumina;
- (j) how many hectares are currently used as Residue Disposal Areas;
- (k) what is the total area of closed Residue Disposal Areas;
- (l) what area of new Residue Disposal Areas will be required when the company expands to its full approved rate of production;
- (m) how much residue has been produced in each of the last five years;
- (n) what is the total amount of residue produced to date;
- (o) how much residue will be produced each year when the company expands to its full approved rate of production;
- (p) when do the company's mining leases expire;
- (q) when does the company anticipate completion of its approved expansion;
- (r) when did Alcoa begin exporting bauxite;
- (s) how much bauxite has been exported to date;
- (t) how many hectares are mined each year for bauxite for export;
- (u) how many hectares have been mined to date for bauxite for export;
- (v) will the Minister please table a map showing the mining leases, the area mined to date, and the area rehabilitated to date; and
- (w) if no to (v), why not?

Hon Alannah MacTiernan replied:

The Department of Jobs, Tourism, Science and Innovation advises:

- (a) Tenements held by Alcoa of Australia Limited (Alcoa) are listed below. 1 State Agreement Act tenement;
 - 9 General Purpose Leases;
 - 1 Miscellaneous Licence;
 - 4 pending Exploration Licences; and
 - 15 Mining Leases.

Further tenement details outlined [See tabled paper no 1387.]

- (b)

Clearing (ha)		
Year	Huntly Mine	Willowdale Mine
2013	674	211
2014	633	195
2015	571	184
2016	470	160
2017	497	178

(c)

Approved Mining and Management Program predicted clearing rates (ha):					
Year	2017	2018	2019	2020	2021
Planned Clearing – Huntly	491	487	486	475	478
Planned Clearing – Willowdale	317	166	169	213	215

(d)

Total Clearing up to December 2017 (ha)	
Jarrahdale	4,090
Huntly	15,189
Willowdale	5,551
Total:	24,830

(e) 100%.

(f)

Total Rehabilitation up to December 2017 (ha):	
Jarrahdale	4,088
Huntly	11,028
Willowdale	4,204
Total:	19,320

(g) 15,358 ha have been rehabilitated using jarrah forest species. The remaining 3,962 ha consist predominantly of Eucalyptus species native to the eastern states of Australia and some areas of pine. These introduced species were selected for their resistance to Phytophthora.

Rehabilitation Post 1988 (ha):	
Jarrahdale	2,254
Huntly	9,073
Willowdale	4,031
Total:	15,358

(h) (i)–(ii) Bauxite 33.2 Mt (dry) and alumina approximately 9 Mt.

(i) (i)–(ii) Alcoa has a five-year ‘rolling’ mine plan that is reviewed annually by the Mine Management Program Liaison Group in accordance with Ministerial Statement 728.

2017 – 2021 Approved MMP (Mt dry)	
2017	32.66
2018	32.384
2019	32.936
2020	31.924

2021	33.58
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Alumina production limits are prescribed through Ministerial Statements and are subject to relevant Part V licensing limits under the *Environmental Protection Act 1986*.

- (j) 1,500 ha.
- (k) 300 ha.
- (l) With the introduction of residue filtration, Alcoa can now stack within the existing footprint for a number of years without the need for expanding, even if production was increased to approved limits.

Alcoa has Long-Term Residue Management Strategies (LTRMS) for each refinery which are updated every five years. These are designed to inform both government and community about long-term planning and management strategies including the location of future residue drying areas; current plans for closure and future land use options; and current research into residue management and reuse.

- (m)

Residue Production (Mt)					
	2013	2014	2015	2016	2017
Kwinana	4.52	4.70	4.55	4.62	4.37
Pinjarra	8.30	8.53	8.60	8.71	8.65
Wagerup	5.14	5.10	5.07	5.24	5.21

- (n)

Total residue produced by refinery to the end of 2017 (Mt)	
Kwinana	175.5
Pinjarra	263.6
Wagerup	123.7

- (o)

Projected Residue Production if Alcoa expanded to approved production limits		
	Production (Mtpa Al ₂ O ₃)	Residue (Mtpa)
Kwinana	2.2	4.6
Pinjarra	5.0	9.5
Wagerup	4.7	8.9

- (p) ML 1SA currently expires in 2045 but provision exists in the Alumina Refinery Agreement Act 1961 for Alcoa to apply for a further mineral lease. This information is publicly available at AustLii Western Australian Current Acts at:

http://www.austlii.edu.au/au/legis/wa/consol_act/araa1961256/

- (q) The Wagerup Unit Three expansion remains under suspension.

- (r) 2016.

- (s)

Bauxite Exports (Kt, wet)	
2016	87
2017	890
2018 (YTD March)	238

- (t) Approximately 36 ha to date. Bauxite mined for export is included as part of Alcoa's approved mining program.

- (u) Approximately 17 ha to date. Bauxite mined for export is included as part of Alcoa's approved mining program.

- (v) See map [See tabled paper no 1387.]
- (w) Not applicable.