

ALCOA AND WORSLEY CORPORATIONS — TENEMENTS HELD

1975. Hon Robin Chapple to the Leader of the House representing the Minister for State Development

For each of Alcoa World Alumina and Worsley Alumina Pty Ltd —

- (1) How many tenements are held by each company by type, number and hectare size?
- (2) How many hectares are currently mined each year?
- (3) How many hectares will be mined each year when the company expands to its full approved rate of production?
- (4) What is the total area mined to date?
- (5) How much of the total area mined required the clearing of native forest?
- (6) How many hectares have been rehabilitated to date?
- (7) How much of this area has been rehabilitated with jarrah forest species?
- (8) What is the area of the company's bauxite mining lease(s) in the South-West?
- (9) What is the current annual production of —
  - (a) bauxite; and
  - (b) alumina?
- (10) When the company expands to its full approved rate of production, what will be the annual production of —
  - (a) bauxite; and
  - (b) alumina?
- (11) How many hectares are currently used as Residue Disposal Areas each year?
- (12) What is the total area of Residue Disposal Areas to date?
- (13) How many hectares will be used as Residue Disposal Areas each year when the company expands to its full approved rate of production?
- (14) How much residue is currently produced each year?
- (15) What is the total amount of residue produced to date?
- (16) How much residue will be produced each year when the company expands to its full approved rate of production?
- (17) For how much longer does its mining lease extend?
- (18) Will the Minister please table a map showing —
  - (a) the mining lease;
  - (b) the area mined to date; and
  - (c) the area rehabilitated to date?

Hon NORMAN MOORE replied:

Department of State Development advises:

- (1) The attached two "tenement enquiry reports" tabulate the live and pending leases for Alcoa World Alumina Australia (Alcoa) and the BHP Billiton Worsley Joint Venture (Worsley). The latter comprises the companies BHP Billiton Aluminium (Worsley) Pty Ltd et al. [See paper 1979.]
- (2) Worsley — the area cleared for mining and associated development in 2009 was 306 hectares. This area includes the expansion associated with the development of the Marradong Mine. In 2007 and 2008, the areas cleared were 217 hectares and 143 hectares respectively.  
  
Alcoa — the area to be cleared for mining for the next five years will be approximately 630 hectares per year.
- (3) Worsley — During the expansion phase into Marradong Mine the rate of clearing for mining and associated development will be elevated above the historical average. Once the expansion development

- is complete, it is expected that Worsley will be clearing approximately 240 hectares per year to meet its higher production capacity.
- Alcoa — the rate of clearing for mining is not expected to change in the foreseeable future.
- (4) Worsley — the total area cleared for mining and associated development from 1980 to 2009 is 3,173 hectares.
- Alcoa — has cleared approximately 18,200 hectares for mining purposes from 1966 to the present.
- (5) Worsley — of the area cleared from 1980 to 2009, 2,712 hectares were native forest.
- Alcoa — all of the area cleared was native forest.
- (6) Worsley — the total area rehabilitated from 1980 to 2009 is 1,847 hectares.
- Alcoa — the total area rehabilitated from 1966 to the present is 14,945 hectares.
- (7) Worsley — A total of 1,410 hectares of Crown land has been rehabilitated to date with jarrah forest species. The early rehabilitation (1986-1990) included jarrah, marri and some Eastern States eucalypt tree species. The individual tree seedlings from these Eastern States eucalypt tree species have since been identified and removed from the rehabilitation.
- Alcoa — Non-native eucalypt species were used up until 1988 in accordance with prescriptions agreed with State government agencies. Only jarrah forest species have been used in rehabilitation since 1988. Approximately 4,000 hectares of rehabilitation were completed up to 1988 and approximately 11,000 hectares since.
- (8) The areas of the Alcoa (ML1SA) and Worsley (ML258SA) bauxite mineral leases can be found in the two attached "tenement enquiry reports" — see answer to part (1).
- (9) (a) Worsley — 12.2 Mtpa (million tonnes per annum)  
Alcoa — 34 Mtpa
- (b) Worsley — 3.4 Mtpa  
Alcoa — 8.9 Mtpa
- (10) (a) Worsley — 16.5 Mtpa  
Alcoa — no expansion planned
- (b) Worsley — 4.7 Mtpa  
Alcoa — no expansion planned
- (11) Residue disposal areas are expanded once every few years to accommodate increases in production or closure of older disposal areas. As such, there is not a specific area used per year. See answer to part (12) for the total area currently being utilised for residue disposal by each company.
- (12) Worsley — 633 hectares (includes rehabilitated areas)
- Alcoa — Kwinana 409 hectares; Pinjarra 597 hectares; and Wagerup 363 hectares
- (13) See answer to part (11).
- (14) Worsley — approximately 7.4 Mtpa (varies with production grades and throughput)
- Alcoa — approximately 17 Mtpa (varies with production grades and throughput)
- (15) Worsley — 110 Mt to the end of financial year 2009
- Alcoa — 416 Mt to the end of 2009
- (16) Worsley — approximately 10.3 Mtpa
- Alcoa — no expansion planned
- (17) Worsley — Potentially the leases (for mining, alumina production and residue storage) will extend until 2046.
- Alcoa — The lease currently expires in 2045, but an option exists for Alcoa to apply to extend the lease for another 21 years.
- (18) (a) For Alcoa and Worsley see attached map provided by the Department of Mines and Petroleum. The area denoted as AM70/1 represents the current Alcoa bauxite lease, while the area denoted as AM70/258 represents the current Worsley bauxite lease. [See paper 1979.]

- (b)-(c) Alcoa — see attached map titled "Alcoa World Alumina WA". Key: Main bauxite lease area (ML1SA) shown outlined in red, rehabilitation areas in yellow, and the current area cleared in pale green. [See paper 1979.]

Worsley — see attached map titled "Drilling, Clearing and Rehabilitation July 2008 — June 2009" provided by Worsley. The current mine operational (cleared) areas are outlined in solid black lines, the areas cleared in 2009 in pink and areas rehabilitated to date in pale and mid green. The latter represents rehabilitation performed in the 2009 financial year. [See paper 1979.]