

KWINANA INDUSTRIAL AIR BUFFER ZONE — EXTENSION

4841. Hon Lynn MacLaren to the Minister for Mental Health representing the Minister for Environment

In regard to the decision recently to extend the Kwinana Industrial Air Buffer Zone made by the Western Australian Planning Commission in September 2010, please outline the following —

- (1) What technologies could be used to reduce any current perceived dust problems caused by Alcoa's operation and to what extent have these alternatives been explored?
- (2) Can the Minister confirm that Alcoa only uses sprinklers to suppress dust?
- (3) Could mulching be used to suppress dust?
- (4) How is the dust being monitored and where are dust monitors specifically located?
- (5) Who controls dust monitoring (the Government or Alcoa)?
- (6) What are the known health risks in the affected area and surrounds as a result of Alcoa's operations?
- (7) Have there been any independent impact statements and/or assessments conducted regarding the current and projected impact of Alcoa's operations in the area?
- (8) If yes to (7), please provide details.
- (9) What independent assessments of Alcoa's operations in the area are planned in the future?
- (10) What are the known environmental risks in the affected area?

Hon HELEN MORTON replied:

The Minister for Environment has provided the following response:

- (1)–(2) The Department of Environment and Conservation (DEC) has advised that Alcoa currently uses various methods of dust control for its residue storage areas (RSAs), including sprinklers and water carts, mulch, oil, bitumen, pastures, blue metal and carbonation.

I am advised that Alcoa has initiated a research program which reviews new and alternative dust control measures. DEC is not aware of any other suitable methods of dust suppression which are not currently utilised by Alcoa.

- (3) Mulch is currently used on external embankments, together with various other dust suppression methods. Mulch cannot be used directly on residue as this would inhibit the drying process and reduce the drying capacity of each RSA.
- (4) DEC requires Alcoa to operate high volume samplers at locations defined in its licence. These samplers measure particulates over a 24-hour period and are located in the direction of prevailing wind conditions.

Monitors are located between approximately 300 and 900 metres from Alcoa's Kwinana RSAs. All dust monitoring data are submitted to DEC annually.

DEC also requires Alcoa to maintain a particulate monitoring network which provides instantaneous particulate results. The locations for this network are not specified by the licence, but are intended to be utilised by Alcoa to manage dust generated on-site.

- (5) Alcoa's licence conditions require it to operate and maintain dust monitors.
- (6) This question should be referred to the Minister for Health.
- (7)–(8) DEC is aware that a dust assessment and Health Risk Assessment (HRA) have been completed by environmental consultants on behalf of Alcoa. The HRA is a generic assessment which looks at refinery and RSA impacts, and is also applicable to Alcoa's Wagerup and Pinjarra refineries.

The HRA was originally required by the Environmental Protection Authority as part of the public environmental review process for Alcoa's Pinjarra Efficiency Upgrade and the Wagerup 3 expansion proposal. Both DEC and the Department of Health (DoH) reviewed the HRA and provided their comments. The HRA was independently peer reviewed by Professor Philip Weinstein of The University of Queensland.

The findings have been applied to the Kwinana refinery as a voluntary action by Alcoa to understand its potential contribution to health risks in the environment surrounding the RSAs. DEC is not aware of any other independent assessments.

Any proposed expansion or alterations of Alcoa's RSA are assessed by DEC. These assessments are based on information provided by Alcoa and environmental consultants.

- (9) I am not aware of any planned independent assessments.
- (10) The environmental risks in the area are defined in the Environmental Protection (Kwinana) (Atmospheric Wastes) Policy 1999. Environmental risks include potentially elevated dust, odour, nitrogen oxides, sulfur dioxide, volatile organic compounds, and noise emissions.