



Your ref: Petition 136
Our ref: DP/11/00295
Enquiries: Neil Fox
Telephone: (08) 6551 9291

Hon Brian Ellis MLC
Chair
Legislative Council Committee Office
Parliament House
PERTH WA 6000

Dear Sir

**PETITION 136 – KWINANA INDUSTRIAL BUFFER ZONE EXTENSION
(MANDOGALUP)**

I refer to your letter of 24 November 2011 and provide the following in response to the questions raised therein.

1. The expansion of the buffer in the Mandogalup locality was established by a resolution of the Western Australian Planning Commission. The expanded buffer is currently not reflected in the planning framework.
2. Affected residents and private landowners were not consulted prior to adoption of the expanded buffer. The buffer was determined on the basis of technical advice received from the Departments of Environment and Conservation and Health, which was subsequently considered by the Kwinana Buffer Review Committee and recommended to the WAPC. Therefore, expansion of the buffer was not potentially subject to change by way of public consultation.
3. The primary objective of the buffer, consistent with advice from the Departments of Environment and Conservation and Health, is to restrict more intensive development of sensitive uses, including residential and similar uses, within the buffer. While such restrictions would normally be achieved by reflecting the buffer in the statutory planning framework this has not yet occurred, and will now be held in abeyance, given the recent State Administrative Tribunal decision.
4. Affected residents/landowners were advised of the expanded buffer via a letter dated 4 October 2011 which included a 'Frequently Asked Questions' document (copy attached).

PUBLIC

5. It is understood from the Department of Environment and Conservation that the Wattleup Road Development Company is liaising with that Department with a view to commencing a monitoring program in January 2012.
6. Yes.
7. While it has always been intended that the outcome off the review of the buffer be published in due course, it is unlikely that a publication will be finalised pending the results of the monitoring program in the Manodgalup locality and determination of other outstanding parts of the buffer that are also under review.

Thank you for the opportunity to provide the above responses.

Yours sincerely



Eric Lumsden PSM
Director General

4/1/2012

PUBLIC

Our Ref: DP/11/00295/3

[Click [here](#) and type 1st Line of Address]
[Click [here](#) and type 2nd Line of Address]
[Click [here](#) and type 3rd Line of Address]
[Click [here](#) and type 4th Line of Address - delete if not req]
[Click [here](#) and type 5th Line of Address - delete if not req]

Dear [Click [here](#) and type Name]

Kwinana Industrial (including Air Quality) Buffer

As a part of the broader Kwinana Industrial Buffer review process, and based on advice from the Department of Health and Department of Environment and Conservation, the Western Australian Planning Commission has extended the buffer surrounding Alcoa's Mandogalup Residue Disposal Area.

The expanded buffer includes a 1km area where future residential expansion is restricted, with an additional 0.5km beyond this also restricting residential expansion and development of some other sensitive land uses (i.e. kindergartens, hospitals and aged persons housing). The purpose of the additional area is to recognise uncertainties inherent in the level and frequency of impacts from the Alcoa Residue Disposal Area and Kwinana Industrial Area more broadly (see Figure 1 attached). This portion of the buffer will be reviewed in five years time to ensure that its extent and location reflects the current conditions in the area.

Information on various aspects of the buffer is included in the attached *Frequently Asked Questions* document. At the end of the attachment is a list of contact officers to assist with further enquiries.

Yours sincerely



Gary Prattley
Chairman
Western Australian Planning Commission

04 / 10 / 2011

PUBLIC

Frequently Asked Questions and Information: Kwinana (including Air Quality) Buffer

1. What is the purpose of the Kwinana Industrial (including Air Quality) Buffer?

The Kwinana Industrial (including Air Quality) Buffer is an area around the entire Kwinana Industrial Area that aims to provide a separation distance between industries (which may produce pollutants such as sulphur dioxide, dust, noise, light and odour) and other land uses, such as residential development.

By maintaining a separation distance between industry and residential development the buffer area also seeks to avoid restrictions being placed on the activities and operations of industry within the industrial area.

2. Why is the buffer being reviewed?

Various sections of the buffer have been under review for some time in order to take into account changing circumstances and available information. The review of the buffer to the north, northeast and east of Alcoa's Mandogalup Residue Disposal Area was finalised in September 2010, after the Western Australian Planning Commission considered technical advice from the Department of Health and Department of Environment and Conservation, which in turn had considered dust monitoring and modelling information from Alcoa.

3. What did the review process entail?

A report titled *Review of the Kwinana Air Quality Buffer* was released for public comment in 2002 by the Western Australian Planning Commission. The review recommended modification to the existing buffer in six areas and identified three areas where further investigation was needed. These areas were reviewed again in 2008 with the aim of finalising the buffer, however, due to a lack of information at the time the area around the Alcoa site was unable to be reviewed and finalised.

Nonetheless, the Western Australian Planning Commission released the *Review of the Kwinana Air Quality Buffer Position Paper* in 2008 to provide further information on the status of the review to landholders and stakeholders. That report is available online at: <http://www.planning.wa.gov.au/publications/1147.asp>.

This position paper contains the then current situation with regard to land use constraints caused by the Kwinana Industrial Area due to various pollutants such as sulphur dioxide, dust, noise, light and odour, and the risks associated with these. The paper also set out the additional actions and information required to finalise the buffer, including around Alcoa's Mandogalup site.

4. What is the latest review decision based on?

As required by the 2008 Position Paper, Alcoa provided a report on dust emissions from its Mandogalup site to assist in reviewing the buffer around that site. Advice was then sought from the Department of Health and Department of Environment and Conservation to assist in determining an appropriate land-use planning buffer that considers environmental, health and amenity impacts.

As a result of that advice and recommendation from the former Kwinana Buffer Review Committee, the Western Australian Planning Commission resolved that the 1km buffer with an additional 0.5km area should be put in place.

5. *Is the supporting information publicly available?*

Due to restrictions on circulation, some of the supporting information is not available online, however, hard copies may be provided upon request if further planning advice is required. Please contact the relevant Department of Planning Officer below if you would like to access further information in conjunction with planning advice.

6. *What operations do Alcoa undertake on site?*

Alcoa's operations at Mandogalup involve drying and storing the residue produced when alumina is extracted from bauxite ore at the nearby Kwinana alumina refinery.

More information regarding Alcoa's operations is available online at:
http://www.alcoa.com/australia/en/info_page/our_challenges_residue_management.asp.

7. *What are the impacts within the 1km and 0.5km buffer areas?*

The area surrounding the Alcoa Residue Disposal Area was considered in both the 2002 and 2008 review due to potential impacts of dust, noise and amenity arising from Alcoa's operations, and remained subject to further investigation.

The revised buffer is designed to incorporate the potential presence of dust and amenity impacts on surrounding land uses, as well as the long-term strategic goals (i.e. expansion of industry, increased residential development) for both the wider Kwinana Industrial Area and surrounding land uses.

Due to the nature of the operations on the Alcoa site and the nature of dust more generally, determining the levels of dust present in the nearby area, and what the frequency and level of impact there is, or will be, on the surroundings is difficult.

As a result, the buffer and additional 0.5km area is designed to provide guidance for land uses within the area, while recognising that there are uncertainties in terms of the level and frequency of potential dust impacts on health and amenity.

8. *Are there any health implications?*

The Alcoa residue drying areas and other industries inside the Kwinana Industrial Area are contributors to dust in the surrounding localities. The potential impact of dust is greatest within the expanded buffer zone. This does not mean that dust levels will be continuously high but rather that areas inside a buffer are, on average, subject to more episodes of high dust levels than areas outside a buffer area.

High concentrations of dust can trigger coughs or sneezes and in people with underlying respiratory conditions like asthma, even small increases in dust concentration can make

symptoms worse. Episodes of high dust levels can be expected to occur anywhere people live in Australia.

High dust concentrations can range from a few points (1–20) above the recommended guideline to hundreds of points above the guideline. **The Kwinana buffer area is expected to experience levels in the few points range.**

The Department of Health advises that the most efficient way to prevent any health problems in an individual is to reduce a whole community's level of risk. The buffer provides this protection by reducing the number of people moving into the area. People living in the area are not necessarily at increased personal risk of adverse health effects since individual tolerances to air pollutants vary considerably and individuals may never experience adverse health effects.

9. What are the implications for zoning and structure planning?

a) Land outside the buffer area:

No changes to zones in the Metropolitan Region Scheme (MRS) or Local Government Schemes are necessary. Some changes to structure planning in Urban or Urban Deferred zones adjacent to the buffer area are likely to be required. Structure planning is generally coordinated by local government in consultation with landowners, the Department of Planning and other relevant State Government agencies.

b) Land inside the buffer area:

Rural zone in the Metropolitan Region Scheme – no changes are required.

Urban or Urban Deferred in the Metropolitan Region Scheme – local governments, the Department of Planning and relevant State Government agencies will need to discuss options for changes to structure planning to reflect land uses that are acceptable within the buffer area. Depending on the changes to structure planning there may be a need to amend some local scheme zones or the Metropolitan Region Scheme.

Any changes to structure plans and local scheme zones that may be proposed will be subject to public consultation and formal approval as set out in the Local Government District Zoning Schemes, including approval by the Western Australian Planning Commission. Proposed changes to the Metropolitan Region Scheme also include public consultation and final approval by the Minister for Planning or Parliament depending on the significance of the amendment.

10. What does this mean for my land and property?

Existing uses can continue to operate as they are. For example, if you already have a house and are living within the buffer areas the expansion of the buffer will not change this.

However, any new uses and / or developments would need to comply with the Western Australian Planning Commission's decision to expand the buffer. For example, approvals for additional residences, subdivision applications, or the development of sensitive uses (i.e. day care centre) would need to consider the Western Australian Planning Commission's decision and comply with the allowed uses within the buffer area.

The Department of Planning will continue to work in collaboration with the Town of Kwinana, City of Cockburn, as well as Department of Health and Department of Environment and Conservation to further define exactly what uses will and will not be appropriate within this expanded buffer area.

11. Where can I get more information?

The Western Australian Planning Commission will be releasing an update to the 2008 Position Paper to reflect the above resolution and provide current information on the status of the review.

Alternatively, a list of contacts is provided below.

SUBJECT	AGENCY	CONTACT	EMAIL	TELEPHONE
Health related implications and advice.	Department of Health	Ms Mirella Goetzmann	mirella.goetzmann@health.wa.gov.au	9388 4999
Advice on licensing and environmental issues.	Department of Environment and Conservation	Industry Regulation Unit	Kwinana2@dec.wa.gov.au	9411 1777
Advice on Metropolitan Region Scheme town planning matters.	Department of Planning	Mr Andrew Trevor	andrew.trevor@planning.wa.gov.au	6551 9298

Please contact your local government authority (City of Cockburn or Town of Kwinana) for all local government related issues.

PUBLIC