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Report No: 1298

MINISTER FOR THE ENVIRONMENT

# BRICK AND TILE WORKS, MALAGA – PROPOSAL UNDER S46 OF THE EP ACT TO CHANGE CONDITIONS AND COMMITMENTS OF STATEMENTS 003 AND 352 (ASSESSMENT NO. 1740)

I refer to your letter of 13 March 2008 requesting the Environmental Protection Authority (EPA) to report to you on the proposed changes to the environmental conditions for the Brick and Tile Works, Malaga. The proponent for this project is Austral Bricks (WA) Pty Ltd.

The following is my report to you pursuant to section 46(3) of the *Environmental Protection Act 1986*.

### Introduction

The proposal for the brick and tile works at Malaga was initially assessed by the EPA in 1987. In 1994 an amendment to the proposal was assessed. This amendment related to the subdivision of part of the brickworks site and did not alter the operation of the brickworks in any way. Since 1987 more has become known about brickwork emissions. As a result the conditions imposed on the proposal in 1987 are out-dated.

Brickworks are prescribed premises and the Department of Environment and Conservation (DEC) licenses emissions under Part V of the EP Act. The Part V processes of works approval and licensing, together with other legislation, such as the *Environmental Protection (Noise) Regulations 1997* and the *Environmental Protection (Unauthorised Discharge) Regulations 2004*, and other regulatory controls under the EP Act, such as Environmental Protection Notices and Prevention Notices, are more appropriate and more flexible methods of managing emissions from brickworks than Ministerial conditions.

#### Discussion

### Statements 003 and 352

Statement 003 is the original statement for the project and statement 352 is an amendment to statement 003 under section 46 of the *Environmental Protection Act* 1986. These statements need to be read in conjunction.

Many of the conditions and commitments contained in these statements are or can be managed under Part V licence. Others have been fulfilled and cleared by the Chairman of the Environmental Protection Authority/Department of Environment and Conservation under delegation from the Minister for the Environment.

Table 1 provides a list of all conditions and commitments, reasons why removal, replacement or retention in the statement is recommended and recommended alternative management, where applicable.

### **EPA Recommendation**

# Deletions of conditions from Statement 003 and commitments common to Statements 003 and 352

It is recommended that the following conditions and commitments are *deleted*: Condition 2, 3, 4, 5, 6, 7, 10, and Commitments 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12 and 13.

### Communication 1, 2, 3, 1, 0, 7, 0, 2, 10, 12, 12 min

**Deletion of condition from Statement 352** 

It is recommended that the following condition is *deleted*: Condition 1A.

# **Amendment to conditions from Statement 352**

It is recommended that condition 1B is *replaced* by the current standard implementation condition.

It is recommended that condition 8 is *replaced* by the current standard proponent condition.

It is recommended that condition 9 is *replaced* by a revised decommissioning condition.

#### Additional condition recommended

It is recommended that a condition requiring industrial traffic to use the entry at Beach Road and Bonner Drive is *inserted* as condition 3. This condition will *replace* commitment 5 of Statement 003 and 352.

It is recommended that updated procedural notes and a Schedule 1, describing the project, be *inserted*.

A new recommended statement is attached.

**Dr Paul Vogel** CHAIRMAN

4 August 2008

Table 1 Statements 003 and 352

| Number          | Condition   | Recommendation                                    |
|-----------------|---|---|
| 1A              | Proponent Commitments   | Delete as no                                      |
| (Statement      | The proponent has made a number of environmental  | commitments will be                               |
| 352)            | management commitments in order to protect the  | retained.   |
|                 | environment.  |   |
|                 | In implementing the proposal, including the   |   |
|                 | modification to subdivide Lot 121 Illawarra Crescent,   |   |
|                 | Malaga, as reported on in Environmental Protection  |   |
|                 | Authority Bulletin 731, the proponent shall fulfil  |   |
|                 | commitments made in the Notice of Intent and the  |   |
|                 | Addendum Notice of Intent; provided that the  |   |
|                 | commitments are not inconsistent with the conditions  |   |
|                 | or procedures contained in this statement. (A copy of   |   |
|                 | the commitments is attached.)   |   |
| 1B              | Implementation  | Changes to proposals                              |
| (Statement      | Changes to the proposal which are not substantial   | without significant                               |
| 352)            | may be carried out with the approval of the Minister  | environmental impact are                          |
|                 | for the Environment.  | now regulated under                               |
|                 | Subject to the conditions in this amended statement,  | s45c of the                                       |
|                 | the manner of detailed implementation of the  | Environmental                                     |
|                 | proposal shall conform in substance with that set out   | Protection Act (1986).                            |
|                 | in any designs, specifications, plans or other technical  |   |
|                 | material submitted by the proponent to the  | Replace the                                       |
|                 | Environmental Protection Authority with the   | implementation                                    |
|                 | proposal. Where, in the course of that detailed   | condition with the                                |
|                 | implementation, the proponent seeks to change those   | current standard version.                         |
|                 | designs, specifications, plans or other technical   |   |
|                 | material in any way that the Minister for the   |   |
|                 | Environment determines on the advice of the   |   |
|                 | Environmental Protection Authority, is not  |   |
|                 | substantial, those changes may be effected.   |   |
| 2               | The fluoride mass emission rate shall never exceed 1  | Fluoride emissions rates                          |
| (Statement      | gram per second from the whole plant.   | regulated under the                               |
| 003)            |   | current Part V* licence.                          |
| 1               |   | Retain the upper limit in                         |
| -               |   | the proposal description.                         |
|                 | A11   | Delete condition.                                 |
| (Statement      | All gaseous process emissions shall be vented to the  | A 35 metre stack has                              |
| (Statement      | atmosphere through a stack with a minimum height of   | been built. Manage any                            |
| 003)            | 35 metres.  | changes to stack height                           |
|                 |   | under the Part V works                            |
|                 |   | approval and licensing                            |
|                 |   | process. Delete condition.                        |
|                 | The management shall marie disally mention the assessment   |   |
| 4<br>(Statement | The proponent shall periodically monitor the gaseous  | Managed under current Part V licence. Continue    |
| (Statement      | emissions from the plant and report to the  | l I   |
| 003)            | Environmental Protection Authority on   | to manage under Part V licence. Delete condition. |
| 1               | commencement of operations and thereafter upon the request of the Environmental Protection Authority. | nochee. Delete condition.                         |
| 5               | The monitoring programme shall include details of   | Cleared 14/9/88, deletion                         |
| <u>J</u>        | The monitoring programme shall include details of   | Cicarcu 14/9/00, ucicii0ii                        |

| Number     | Condition   | Recommendation             |
|------------|---|----------------------------|
| (Statement | sampling the gaseous emissions before and after           | recommended. The           |
| 003)       | scrubbing.  | monitoring programme       |
| ·          | _   | contained this             |
|            |   | information.               |
| 6          | The monitoring programme shall be submitted to the        | Cleared 14/9/88, deletion  |
| (Statement | Environmental Protection Authority for approval           | recommended.               |
| 003)       | prior to commencement of operations.                      | Monitoring of emissions    |
|            |   | from the project is        |
|            | •   | regulated under Part V     |
|            |   | licence. Currently         |
|            |   | monitoring of gaseous      |
|            |   | emissions before           |
|            |   | scrubbing is not required. |
|            |   | Continue to manage         |
|            |   | under part V licence.      |
| 7          | If the proponent is unable to meet the above              | Condition relates to       |
| (Statement | conditions, or the operations of the plant are having a   | cleared conditions and     |
| 003)       | detrimental impact on the surrounding area, the           | the impact of emissions    |
|            | Environmental Protection Authority shall require, as a    | regulated under the Part   |
|            | condition of licence, that the proponent modify its       | V licence. It is           |
|            | operation so that gaseous emissions are reduced to a      | redundant and deletion     |
|            | level acceptable to the Environmental Protection          | recommended.               |
| 8          | Authority.  | Replace with the current   |
| (Statement | Proponent These conditions legally apply to the nominated | proponent condition.       |
| 352)       | proponent.  | proponent condition.       |
| 332)       | No transfer of ownership, control or management of        |                            |
| 8-1        | the project which would give rise to a need for the       |                            |
|            | replacement of the proponent shall take place until the   |                            |
|            | Minister for the Environment has advised the              |                            |
|            | proponent that approval has been given for the            |                            |
|            | nomination of a replacement proponent. Any request        |                            |
|            | for the exercise of that power of the Minister shall be   |                            |
|            | accompanied by a copy of this statement endorsed          |                            |
|            | with an undertaking by the proposed replacement           |                            |
|            | proponent to carry out the project in accordance with     |                            |
|            | the conditions and procedures set out in the statement.   |                            |
| 9          | Decommissioning and Rehabilitation                        | Replace with a revised     |
| (Statement | The satisfactory decommissioning and rehabilitation       | closure condition.         |
| 352)       | of the site is the responsibility of the proponent.       |                            |
|            | At least six months prior to any planned                  |                            |
| 9-1        | decommissioning of the site, the proponent shall          |                            |
|            | prepare a decommissioning and final rehabilitation        |                            |
|            | programme.  |                            |
| 0.0        | The proponent shall implement the programme               |                            |
| 9-2        | required by condition 9-1.                                |                            |
| 10         | Compliance Auditing                                       | Conditions relating to     |
| (Statement | In order to ensure that environmental conditions and      | environmental              |
| 352)       | commitments are met, an audit system is required.         | performance are            |
| 1 3327     |   |                            |

| Number     | Condition  | Recommendation            |
|------------|--|---------------------------|
| 10-1       | Compliance Reports", to help verify the                | deleting. Therefore this  |
|            | environmental performance of this project, in          | condition can be deleted. |
|            | consultation with the Environmental Protection         | Regulate by Part V        |
|            | Authority.   | licence requirement for   |
|            |  | an annual audit           |
|            |  | compliance report on the  |
|            |  | licence conditions.       |
|            | Procedure  |                           |
| 1          | The Environmental Protection Authority is              | This procedure is no      |
| (Statement | responsible for verifying compliance with the          | longer valid and deletion |
| 352)       | conditions contained in this statement, with the       | recommended.              |
|            | exception of conditions stating that the proponent     |                           |
|            | shall meet the requirements of either the Minister for |                           |
|            | the Environment or any other government agency.        |                           |
| 2          | If the Environmental Protection Authority, other       | This procedure be         |
| (Statement | government agency or proponent is in dispute           | replaced with the current |
| 352)       | concerning compliance with the conditions contained    | version.                  |
|            | in this statement, that dispute will be determined by  |                           |
|            | the Minister for the Environment.                      |                           |

| Number | Commitments (common to both Statements)  | Recommendation  |
|--------|--|---|
| 1      | The roads and stock yard will be sealed and will be washed and vacuumed at regular intervals. They will be washed daily. | Manage generation of<br>dust from the site under<br>Part V provisions**, as<br>necessary. Roads and<br>stock yard are sealed.<br>Delete commitment.   |
| 2      | Under quality or damaged products will be recycled through the project.  | This commitment is part of the proposal (Notice of Intent, undated)*** and need not be retained as a commitment. Delete commitment.   |
| 3      | The exhaust stack will be fitted with an oxygen meter.   | The stack is fitted with an oxygen meter. Manage monitoring under Part V licence, as necessary. Delete commitment.  |
| 4      | There will be a minimum 10 m buffer area adjoining major roads and land use interfaces.                                  | Due to parts of the original site being sold and subdivided for commercial use this commitment is not being met. The purpose of the buffer is reduce visual, noise and dust impact to neighbouring areas. The site is now surrounded by commercial development. The |

| Number | Commitments (common to both Statements)  | Recommendation                           |
|--------|--|--|
| - 14   |  | proponent is required to                 |
|        |  | comply with the                          |
|        |  | Environmental                            |
|        |  | Protection (Noise)                       |
|        |  | Regulations 1997 and                     |
|        |  | dust regulated under Part                |
|        |  | V provisions. Therefore                  |
|        |  | the commitment to a                      |
|        |  | buffer is unnecessary                    |
|        |  | provided noise and dust                  |
|        |  | is managed to                            |
|        |  | satisfactory levels from                 |
|        |  | the site Delete                          |
|        |  | commitment and manage                    |
|        |  | under Part V provisions.                 |
| 5      | All industrial traffic will enter and leave the site via   | Redraft as a condition                   |
| 3      | Beach Road.  | that industrial traffic                  |
|        | Beach Road.  | shall enter and leave the                |
|        |  | site from Beach Road                     |
|        |  | and Bonner Drive to                      |
|        |  | reflect current access.                  |
| 6      | Discharge from the mould weeking process will be   | <u> </u>                                 |
| 0      | Discharge from the mould washing process will be directed into a series of settlement tanks and filtered | Mould washing is no longer undertaken on |
|        | through baffles for recycling.   | site. Manage any future                  |
|        | through barries for recycling.   | proposal involving waste                 |
|        |  | water under Part V                       |
|        |  |  |
|        |  | works approval. Delete commitment.       |
| 7      | The scrubber will incorporate a LUHR filter as   | This scrubber is no                      |
| /      | installed at Penta Klinker.  | longer in use. Part V                    |
|        | instance at I cita Kiniker.  | licensing requirements                   |
|        |  | set emission limits which                |
|        |  | determine the type of                    |
|        |  | scrubber that is suitable.               |
|        |  | Continue to manage                       |
|        |  | under Part V. Delete                     |
|        |  | commitment.                              |
| 8      | All exhausts will pass through the scrubber.   | Regulated under Part V                   |
|        | The exhausts will pass through the serubber.   | licence which allows for                 |
|        |  | the scrubber to be by-                   |
|        |  | passed for maintenance                   |
|        |  | for short periods. Due to                |
|        |  | the type of scrubber                     |
|        |  | installed this                           |
|        |  | commitment cannot be                     |
|        |  | met. Continue to                         |
|        |  | regulate under Part V                    |
|        |  | licence. Delete                          |
|        |  | commitment.                              |
| 9      | The kiln exhaust stack will be 35 m above ground   | The stack has been built                 |
|        | level.   | to this height. Delete                   |
|        | 1  | 10 min margin. Donoto                    |

| Number | Commitments (common to both Statements)  | Recommendation   |
|--------|--|--|
|        |  | commitment.  |
| 10     | The average fluoride concentration at 600 m from the plant stack will be less than $0.03~\mu g/m^3$ .  | Regulate the ambient concentration of fluoride through Part V licensing as necessary.  |
| 11     | An electric clay excavator will operate inside the building.   | The proponent is required to comply with the Environmental Protection (Noise) Regulations 1997. Delete commitment.   |
| 12     | The unloading of raw materials will take place within a building. Entry to and exit from this building by the trucks carrying the materials will be through openings protected by permanent curtains of 150 mm wide strips of discarded conveyor belting. Each curtain will consist of a double layer of belting, to give the maximum attenuation of noise from within the building. | This commitment is not being complied with as unloading takes place outside of the building into a below ground crusher. The purpose of the commitment was to reduce noise and dust levels. Manage under the Environmental Protection (Noise) Regulations 1997 and Part V provisions. Delete commitment. |
| 13     | The crusher will be contained within the building in which the raw materials are off-loaded, and will, therefore, be shielded. In addition the crusher will:  - be set in a concrete pit, below the tipping level of the trucks;  - operate by a slow controlled knife action, rather than by an impact or hammer action.  | This is currently done. The proponent is required to comply with the Environmental Protection (Noise) Regulations 1997. Delete commitment.   |

- \* Part V is Part V of the Environmental Protection Act (1986)
- \*\* Part V provisions include works approval, licence, environmental harm provisions, notices and regulations under Part V of the *Environmental Protection Act* (1986)
- \*\*\* Notice of Intent, undated; Notice of Intent, Proposed Tile and Refractory Brick Manufacturing Plant, Malaga, Ray Belton, undated

# STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL (PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE ENVIRONMENTAL PROTECTION ACT 1986)

BRICK AND TILE WORKS, MALAGA

**Proposal:** The construction and operation of a brick making facility on Lot

121 on Plan 817803 Bonner Drive, Malaga, as documented in

schedule 1 of this statement.

**Proponent:** Austral Bricks (WA) Pty Ltd

**Proponent Address:** Locked Bag 100, MIDLAND Private Boxes WA 6936

Assessment Number: 1740

**Previous Assessment Numbers:** 027 & 819

Previous Statement Numbers: 003 & 352 (Published on 1 September 1987 and

18 April 1994, respectively)

Report of the Environmental Protection Authority: Report 1298

Previous Reports of the Environmental Protection Authority: Bulletins 292 & 731

The implementation of the proposal to which the above reports of the Environmental Protection Authority relate is subject to the following conditions and procedures, which replace all previous conditions and procedures:

# 1 Proposal Description

1-1 The proponent shall implement the proposal as assessed by the Environmental Protection Authority and described in schedule 1 of this statement subject to the conditions and procedures of this statement.

Published on

# 2 Proponent Nomination and Contact Details

- 2-1 The proponent for the time being nominated by the Minister for the Environment under sections 38(6) or 38(7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal.
- 2-2 The proponent shall notify the Chief Executive Officer (CEO) of the Department of Environment and Conservation of any change of the name and address of the proponent for the serving of notices or other correspondence within 30 days of such change.

### 3 Site Access

3-1 All industrial traffic shall enter and leave the site from Beach Road and Bonner Drive.

### 4 Decommissioning

- 4-1 At closure, the proponent shall decommission the site in a manner which ensures that the site is suitable for future land uses.
- Within six months of closure, the proponent shall remove or, if appropriate, retain plant and infrastructure as agreed in consultation with relevant stakeholders.
- 4-3 Within six months of closure, the proponent shall identify contaminated areas and provide notification, including proposed management measures, to relevant statutory authorities.
- Within twelve months of closure, the proponent shall rehabilitate all disturbed areas to a standard suitable for the agreed new land use(s).
- Within three months of completing the decommissioning required by condition 4-1, the proponent shall provide a written report to the CEO of the Department of Environment and Conservation on the implementation of the decommissioning.
- 4-6 The proponent shall undertake any further actions to achieve satisfactory decommissioning as required by the CEO of the Department of Environment and Conservation.

### **Procedures**

- 1. The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment and Conservation over the fulfilment of the requirements of the conditions.
- 2. The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.

# The Proposal (Assessment No. 1740)

The proposal is to construct and operate a brick and tile works on Lot 121 on Plan 817803 Bonner Drive, Malaga. The proposal is described in the documents *Notice of Intent, Proposed Tile and Refractory Brick Manufacturing Plant, Malaga, Ray Belton, undated; Addendum, Notice of Intent, Proposed Tile, Refractory Brick Manufacturing Plant, Malaga, Dames & Moore 1987*; and a Section 46 application to change conditions to allow for subdivision of the proposal lot.

The brick and tile works consists of a single gas-fired kiln, chamber dryers, clay storage, clay brick preparation facilities, wastewater/stormwater retention ponds, a stock yard and a sales building.

The Key Proposal Characteristics are shown in Table 1.

Table 1 - Key Proposal Characteristics

| Element                        | Quantities/Description                 |
|--------------------------------|--|
| Brick and tile making capacity | 50 million bricks/tiles per annum      |
| Kiln discharge stack           | Not less than 35 metres in height      |
| Scrubber                       | Appropriate to licence conditions      |
| Discharge of hydrogen fluoride | Maximum from site of 1 gram per second |
| Clay Stockpiles                | Enclosed storage                       |
| Truck movements                | Approximately 120 per day              |

# Figures (attached)

Figure 1 - Site Layout

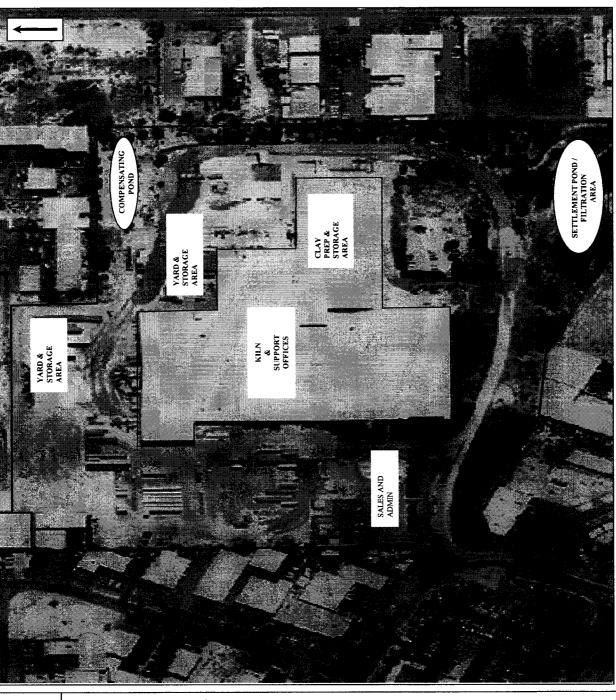


LEGEND

← NORTH

MAIN ENTRANCE

--- PROPERTY BOUNDARY



Date of Issue – July 2008

Figure 1: Site Layout