



Report No: 1297

MINISTER FOR THE ENVIRONMENT

AUSTRAL BRICKS (PREVIOUSLY PRESTIGE BRICK) BRICKWORKS AT MIDLAND – PROPOSAL UNDER S46 OF THE EP ACT TO CHANGE CONDITIONS AND COMMITMENTS OF STATEMENTS 002 AND 012 (ASSESSMENT NO. 1734)

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 Brickworks at Midland. 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* (EP Act).

Introduction

The proposal for the brickworks at Midland was assessed by the EPA in 1987. Since then more has become known about brickwork emissions and cumulative impacts in the Swan Valley. 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

Statement 002

The proposal to which this statement relates was not implemented and was replaced with an amended proposal for the site. The amended proposal is subject to statement 012. Therefore statement 002 is not relevant to the current operations on the site.

Statement 012

Many of the conditions and commitments contained in this statement 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. Some conditions and commitments impose requirements on third parties and are not valid. 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.

Note that the conditions and commitments that have been cleared have been cleared after the implementation of stage 1 of the proposal. In view of the fact that stage 2 has not been implemented 21 years after the issuing of the statement, any proposal for the implementation of stage 2 will not necessarily be granted a works approval. Changes in the receiving environment and additional environmental knowledge will need to be considered.

While it is recommended that noise related conditions and commitments are deleted, the brickworks will be required to comply with the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations). During the initial assessment management of noise levels through selection of equipment, installation of barriers and screening and scheduling of operations was proposed. These measures or other management measures should be applied as necessary to reduce noise to meet assigned levels in the Noise Regulations.

EPA Recommendation

Deletions of conditions and commitments

It is recommended that the following conditions and commitments are *deleted*:

Conditions 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12; and

Commitments 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 and 25.

Amendment to condition

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

Additional conditions recommended

It is recommended that the current standard condition regarding proponent nomination and change of address is *inserted* as condition 2.

It is recommended that a condition requiring the prevention of fauna deaths in the wastewater treatment lagoons is *inserted* as condition 3.

It is recommended that a decommissioning condition is *inserted* as condition 4.

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

A new recommended statement is attached.

A handwritten signature in black ink, appearing to read 'Dr Paul Vogel', is written over a horizontal line.

Dr Paul Vogel
CHAIRMAN

4 August 2008

Table 1 Statement 012

Number	Condition	Recommendation
1	Adherence by the proponent to the proposal as assessed by the Environmental Protection Authority and to the commitments given in the Public Environmental report, and the Notice of Intent and in the additional information supplied to the Environmental Protection Authority. (copy of relevant commitments attached.)	Replace with standard implementation condition.
2	The fluoride mass emission rate from the whole plant must not exceed 1.0 gram/second.	Fluoride emissions rates are regulated under the Part V* licence. Retain the upper limit in the proposal description. If Stage 2 implemented, regulate site emissions under Part V works approval and licence. Delete condition.
3	Prior to commissioning, a fluoride scrubber shall be fitted to stage one of the proposal to the satisfaction and specification of the Environmental Protection Authority.	Cleared 24/5/93. If Stage 2 proceeds, regulate site emissions under Part V works approval and licence. Delete condition.
4	The fluoride emissions released to the environment shall be through a stack with a minimum height as specified by the Environmental Protection Authority.	Cleared 24/5/93. Stage 2 could use the same stack or a new stack. Regulate stack height of new stack by Part V works approval. Delete condition.
5	The proponent shall monitor the emission rate and supply the results to the Environmental Protection Authority as part of a monitoring and verification programme approved by the Environmental Protection Authority. The Environmental Protection Authority shall make the results of monitoring available to for public information.	A fluoride monitoring programme was prepared and cleared in 24/5/93. On-going monitoring is required by the current Part V licence. Continue regulation under Part V, as necessary. Monitoring required under Part V licence is publicly available. Delete condition.
6	The proponent shall fund an independent study, to be approved by the Environmental Protection Authority to measure ground level concentrations of fluoride on areas around the plant, and the associated effects on the environment. For appropriate verification of this study, monitoring will have to commence well before the	Cleared 24/5/93 If unacceptable impact is found at a later stage, manage under Part V provisions**. Delete condition.

Number	Condition	Recommendation
	plant becomes operational. If the event that the Environmental Protection Authority is not satisfied with the assessment of the state of the environment as shown in the results of the study, the Environmental Protection Authority shall require the proponent to modify its operations to reduce air emissions to an acceptable level.	
7	If in accordance with Recommendation (6) the Environmental Protection Authority considers that environmental damage has occurred as a result of the brickworks operation, the maximum allowable mass emission rate a per condition (2) shall be reduced to a level such that the objective of the continuing maintenance of current beneficial uses of the locality is met.	Manage under Part V provisions for environmental harm and licence changes to reduce emissions if necessary. Delete condition.
8	If the project proceeds to Stage 2 the proponent shall maintain the fluoride emissions from the total plant within the mass emission rate set in Condition 2 or a subsequently reduced under the requirements of Condition 7.	Regulate by Part V works approval and licensing processes. Delete condition.
9	Prior to the construction of the clay stockpile, the proponent shall submit its clay stockpile management programme, including details of stormwater runoff and landscaping, to the Swan River Management Authority (or its proposed successor the Swan River Trust) and obtain its approval thereto.	Cleared 24/5/93, deletion recommended.
10	The noise emissions from the plant shall be at a level acceptable to the Environmental Protection Authority. This will be controlled by appropriate licensing conditions set under the Environmental Protection Act.	Superseded by the <i>Environmental Protection (Noise) Regulations 1997</i> . Delete condition.
11	Should there be a nuisance from dust associated with the brickworks outside the site boundary then the Swan Shire Council and the nominee of the Minister for Transport should require the proponent to take appropriate action to stop the nuisance occurring, in addition to any other action to stop the nuisance occurring, in addition to any other action the Council is required or empowered to take under other legislation in respect to that nuisance.	This is an invalid condition as it is imposed on third parties. Manage dust generation on the site by Part V provisions, as necessary. Delete condition.
12	If there is to be any filling of any part of the floodplain, it should not take place until it is appropriately zoned and there is a fresh development application before the Shire Council and the State Planning Commission for that land and in any event, the proponent shall landscape the filled area which is not required directly for the clay stockpile, in a manner which utilizes only the indigenous floodplain vegetation of the area.	Deletion recommended as the area is not part of the proposal site any longer.

Number	Commitment	Recommendation
1	A fluoride scrubber will be fitted to Stage 1 of the project to the specification of the Environmental Protection Authority .	Cleared 24/5/93, deletion recommended.
2	Redevelopment strategy plan indicates that the entire original 29 ha site will be used to accommodate the brickworks in two distinctive phases of redevelopment, except for: <ul style="list-style-type: none"> ▪ Approximately 0.6 ha of land to be transferred to Westrail; and ▪ Approximately 2.4 ha of floodplain to be vested as part of the future Helena River linear park concept. 	Cleared 24/5/93, deletion recommended.
3	Use existing railway spur lines into the site.	As this line no longer exists, it is impractical to fulfil the commitment. Delete commitment.
4	All raw materials will be transported mainly by truck to the site. Possibility of rail transport at some future date.	Road transport is the only feasible option at present. It is unlikely that rail transport will be feasible. Delete commitment.
5	Waste bricks will be recycled by recrushing with virgin clay and used in the manufacture of new bricks.	Described in the proposal (PER, 1987)*** Commitment is unnecessary and deletion recommended.
6	To overcome potential dust problems a 'wet process' will be used which involves the addition of water to the raw materials at each stage of the crushing process.	Addition of water is not practical during winter. Manage control of dust on the site under Part V provisions, as necessary. Delete commitment.
7	Clay stockpiles will be continuously watered to eliminate any dust problems created by dumping and truck movement.	Continuous watering is not practical during winter. Manage control of dust on the site under Part V provisions, as necessary. Delete commitment.
8	All gaseous waste, including water vapours, will be discharged from three individual stacks. Two of these stacks will be from the (brick) dryer and will only discharge water vapour. The third will be the kiln exhaust stack, discharging other gases including fluorides. The only visible emission will be a water vapour cloud.	Manage under Part V licence by dark smoke control, as necessary. Delete commitment.
9	A stack of a height to be specified by the Environmental Protection Authority is to be built to	Cleared 24/5/93, deletion recommended. Manage

Number	Commitment	Recommendation
	disperse the kiln exhaust gases.	any future stacks by Part V works approval.
10	An access point for measurement of fluorides in the gas stream will be included.	Cleared 24/5/93, deletion recommended. Manage under Part V provisions.
11	During the first year of operation of the plant it is envisaged that regular inspection of the surrounding area and potential vegetation damage be instigated at any substantiated complaint from the surrounding residents or landusers. If a substantial likelihood (or reasonable suspicion of such) exists that damage is being caused by fluorides from the stack then analysis of foliar content of a representative sample of damaged plants shall be arranged.	Cleared 24/5/93, deletion recommended. Manage any future unacceptable impact under Part V provisions.
12	In the event that a series of reports indicate a recurring problem the area affected will be monitored for ambient ground level concentrations using a high volume sampler or other approved method of monitoring, (as 2628.2 -1984 Ambient Air – Determination of Gaseous Fluorides and Acid-soluble Particulate Fluorides (0.1 gm/m or greater) – Manual, Double Filter Paper Sampling). Monitoring will take place over a 30 or 90 day period.	Ambient monitoring managed under current Part V licence. The commitment as it stands is out of date and deletion recommended.
13	After testing and modelling, should it eventuate that a scrubber is required for any future kilns then Prestige Brick will comply with the requirements of the EPA.	Still valid for Stage 2 kilns. However Part V Brickworks policy now stipulates emission limits. Manage by Part V works approval. Delete commitment.
14	Demolition and follow up landscaping programme will be instituted to ensure the appearance of the site is considerably improved.	Demolition and landscaping has already occurred. The commitment relates to a point in time, i. e. improved over the appearance existing at that point in time and is not auditable. Delete commitment.
15	Prestige Brick will acknowledge its specific responsibilities under the following Acts and Regulations: State Planning Commission Act (1985) Environmental Protection Act (1986) Metropolitan Region Town Planning Scheme Act (1959) Metropolitan Region Scheme (1963) Local Government Act (1960-1982)	This commitment is out dated. The commitment is unnecessary as the proponent is obliged to comply with legal requirements. Delete commitment.

Number	Commitment	Recommendation
	Shire of Swan Town Planning Scheme No 9 (1985) Shire of Swan Extractive Industry By Laws (1982) Noise Abatement Act (1972-1981)	
16	Effluent/wash water from the Saleyards operated by the WA Meat Commission will continue to be treated as it is at present. In the event that part of the treatment system as used as present is interfered with by Prestige Brick, it will be either relocated or re-installed at Prestige Brick's cost.	The Saleyard treatment facilities are no longer on land owned by the proponent. Delete commitment.
17	The WA Meat Commission will be responsible for the operation and maintenance of the treatment/settlement system. Prestige Brick will allow access for such maintenance.	Treatment facilities are on land purchased by the Saleyards and therefore not the proponent's responsibility. Delete commitment.
18	The noise level emanating from the site will comply with the Noise Abatement (Neighbourhood Annoyance) Regulations 1979.	Commitment is out-dated. The proponent has a legal requirement to comply with the <i>Environmental Protection (Noise) Regulations 1997</i> . Delete commitment.
19	The current stormwater drainage system will be utilized.	Cleared 24/5/93, deletion recommended.
20	A strip of land 10 metres by approximately 210 metres within the floodplain of the Helena River will be ceded to the Crown free of cost in order to assist the creation of the Helena River linear park as promoted in the System 6 Report (see Plan A in Notice of Intent), subject to satisfactorily negotiations being concluded with the present owners of the land.	Cleared 24/5/93, deletion recommended.
21	Standard oil and silt trapped manholes to the specifications of the Shire of Swan and the Water Authority of WA will be installed in the existing drainage system discharging to the Helena River floodplain.	Cleared 24/5/93, deletion recommended. Manage under the <i>Environmental Protection (Unauthorised Discharge) Regulations 2004</i> .
22	Stormwater from the proposed clay stockpile area will be collected and discharged into the existing wastewater settlement and treatment lagoons.	Manage stormwater discharge under the <i>Environmental Protection (Unauthorised Discharge) Regulations 2004</i> . Delete commitment.
23	The land embankment and land adjacent to the clay bund for a distance of 15 metres from the site boundary will be landscaped with indigenous floodplain	Commitment relates to land outside the proposal area. Delete commitment.

Number	Commitment	Recommendation
	vegetation.	
24	Only one ingress and egress point will be used at the south-east section of the site, whilst the sale yards remain in operation.	Ingress and egress point not relevant provided industrial traffic does not impact on residential areas. Description of proposal (PER,1987) describes traffic route on major regional roads. Delete commitment.
25	The specification of plant, equipment and building construction will ensure that adequate attenuation of noise is achieved. This is possible within current technology for the type of plant envisaged.	Commitment is redundant as the proponent is required to comply with the <i>Environmental Protection (Noise) Regulations 1997</i> . Delete commitment.
	Proposed additional conditions	
	Proponent	Standard proponent condition recommended
	Decommissioning	Condition recommended.
	Fauna management	Condition to prevent fauna deaths in wastewater treatment lagoons recommended.

* 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)*

*** PER 1987, *Public Environmental Report for Prestige Brick, BSD Consultants, March 1987*

RECOMMENDED ENVIRONMENTAL CONDITIONS

Statement No.

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

AUSTRAL BRICKS (PREVIOUSLY PRESTIGE BRICK) BRICKWORKS AT MIDLAND

Proposal: The construction and operation of a brick making facility on Lot 1 on Plan 16497 Military Road, Bellevue, 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: 1734

Previous Assessment Number: 150

Previous Statement Number: 012 (Published on 14 December 1987)

Report of the Environmental Protection Authority: Report 1297

Previous Report of the Environmental Protection Authority: Bulletin 308

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 Fauna

- 3-1 The proponent shall take effective measures to prevent the death of fauna in the wastewater and stormwater treatment ponds.
- 3-2 The proponent shall monitor the presence of fauna in the wastewater and stormwater treatment ponds and report annually to the CEO of the Department of Environment and Conservation.

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.
- 4-2 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.
- 4-4 Within twelve months of closure, the proponent shall rehabilitate all disturbed areas to a standard suitable for the agreed new land use(s).
- 4-5 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*.
3. The brickworks proposal for the same site for which Statement No. 002 was published on 1 September 1987 has not been implemented.

The Proposal (Assessment No. 1734)

The proposal is to construct and operate a brickworks on Lot 1 on Plan 16497 Military Road, Bellevue. The proposal is described in the document *Public Environmental Report for Prestige Brick, March 1987, BSD Consultants 1987*, as amended by the document *Notice of Intent, Amendment to Prestige Brick Works Proposal to Re-develop the Midland Abattoir for a High Technology Brick Works, BSD Consultants, 1987*.

The brickworks consists of a drying oven, a tunnel kiln, clay stockpiles, a stock yard, wastewater and stormwater retention ponds and buildings for administration and workshop, clay preparation, store and fitters' area and storage and ancillary facilities.

The Key Proposal Characteristics are shown in Table 1.

Table 1 – Key Proposal Characteristics

Element	Quantities/Description
Brick making capacity (Stage 1)	50 million bricks per annum
Brick making capacity (Stage 2)	50 million bricks 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	Approximately 250 000 cubic metres with permanent stockpile face to west and south of site.
Stockpile operating times	0700-1900 hours Monday to Friday
Truck movements	Approximately 130 per day, using the regional road network

Figures (attached)

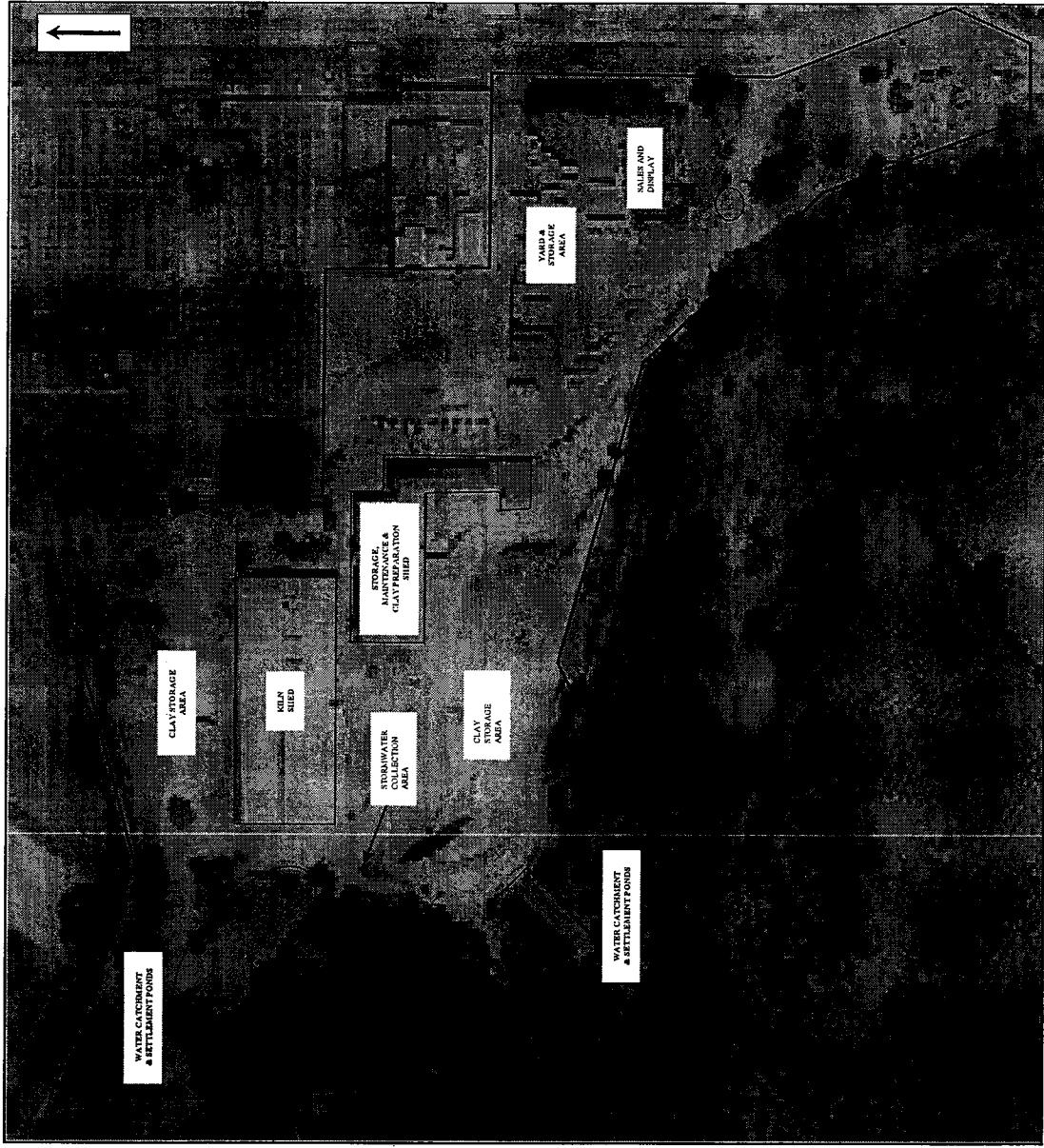
Figure 1 - Site layout

LEGEND

← NORTH

● MAIN ENTRANCE

— PROPERTY BOUNDARY



Date of Issue – July 2008

Figure 1: Site Layout