Government of Western Australia
Department of Environment Regulation

Licence

Environmental Protection Act 1986, Part V

Licensee: Cockburn Cement Limited

Licence: L8683/2012/2

Registered office: Level 1
157 Grenfell Street
ADELAIDE SA 5000

ACN: 008 673 470

Premises address: Cockburn Cement Kwinana Plant
Leath Road
KWINANA BEACH WA 6167
Lot 45 on Diagram 91600
Certificate of Title Volume 2091 Folio 497; and
Part of Lot 12 on Plan 39572
Certificate of Title Volume 2230 Folio 45
(as depicted in Schedule 1)

Issue date: Friday, 25 September 2015

Commencement date: Sunday, 27 September 2015

Expiry date: Saturday, 26 September 2020

Prescribed premises category
Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
43	Cement or lime manufacturing; premises on which – (a) Clay, limes and or limestone material is used in a furnace or kiln in the production of cement clinker or lime; or (b) Cement clinker, clay, limestone or similar material is ground.	Not applicable	< 500 000 tonnes per year

Conditions
This Licence is subject to the conditions set out in the attached pages.

Date signed: 12 February 2016
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Ed Schuller
Senior Manager Industry Regulation, Process Industries
Officer delegated under section 20
of the *Environmental Protection Act 1986*

Contents

Introduction

This Introduction is not part of the Licence conditions.

DER's industry licensing role
The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements
This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link:
http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.

- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.

- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.

Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

Licence fees
If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

Ministerial conditions
If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary
Cockburn Cement Limited ('the Licensee') Kwinana is located on the Swan Coastal Plain, approximately 20km south of Fremantle and approximately 1km inland from the coast. The Kwinana plant is situated in the northern section of the Kwinana Industrial Area and within Area A of the *Environmental Protection (Kwinana) (Atmospheric Waste) Regulations 1992*. The closest residential area is approximately 3km south east of the plant. The Licensee is a subsidiary of Adelaide Brighton Limited, the registered office of which is in Adelaide, South Australia. The Licensee's operations also consist of a lime and cement manufacturing plant at Munster, sea bed dredging at Woodman Point, lime manufacturing plant at Dongara, and a lime hydration plant at Kemerton. The Kwinana facility is primarily involved in the production of cement products by co-milling combinations of clinker, gypsum, limestone and slag. Lime and cement products are then packaged or dispatched in bulk. The Kwinana plant production capacity is as follows:

- hydrated lime: 50,000 tonnes per year; and
- cement: 410,000 tonnes per year.

The plant includes stockpiles, conveyors, mills, silos, packaging equipment and dust control equipment. The Licensee has an Environmental Management Plan (EMP) that also contains environmental improvement activities and plans. The environmental issues for all of the Licensee's plants state-wide are currently overseen under the umbrella EMP.

The Licensee has applied for a licence amendment to construct and operate a dryer with a nominal capacity of 60 tonnes per hour for slag with wet feed of 12% moisture. The proposal includes a new baghouse and other associated infrastructure such as conveyors, silos and bunkers. The key emission risks associated with the proposal are point source emissions to air (combustion gases), fugitive dust, noise and odour.

This Licence is an amended version of licence L8683/2012/2 includes changes to conditions associated with the above-mentioned application and also administrative changes.

Instrument log		
Instrument	**Issued**	**Description**
L8683/2012/1	27/09/2012	New application
L8683/2012/2	24/09/2015	Licence re-issue
L8683/2012/2	04/02/2016	Licensee initiated licence amendment – construction and operation of a new dryer

Severance
It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION

Licence conditions

1 General

1.1 Interpretation

1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

'Act' means the *Environmental Protection Act 1986;*

'Annual period' means the inclusive period from 1 July until 30 June in the following year;

'AS 4323.1' means the Australian Standard AS4323.1 *Stationary Source Emissions Method 1: Selection of sampling positions*;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means:

Department Administering the *Environmental Protection Act 1986*
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au

'Environmentally hazardous material' means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm;

'Licence' means this Licence numbered L8683/2012/2 and issued under the Act;

'Licensee' means the person or organisation named as Licensee on page 1 of the Licence;

'Premises' means the area defined in the Premises Maps in Schedule 1 and listed as the Premises address on page 1 of the Licence;

'Schedule 1' means Schedule 1 of this Licence unless otherwise stated;

'Schedule 2' means Schedule 2 of this Licence unless otherwise stated;

'Schedule 3' means Schedule 3 of this licence unless otherwise stated; and

'STP, dry' means standard temperature and pressure (0^{o}Celsius and 101.325 kilopascals respectively), dry.

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.

1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.

1.1.5 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
(a) pollution;
(b) unreasonable emission;
(c) discharge of waste in circumstances likely to cause pollution; or
(d) being contrary to any written law.

1.2 General conditions

1.2.1 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.

1.2.2 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.2.3 The Licensee shall ensure that uncontaminated stormwater is kept separate from contaminated or potentially contaminated stormwater. Where stormwater has come into contact with possible sources of contamination it should be treated as contaminated.

1.2.4 The Licensee shall not discharge any contaminated water, including water from the truck wash facility, into the environment.

2 Emissions

2.1 General

2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit specified in any part of section 2 of this Licence.

2.2 Point source emissions to air

2.2.1 Prior to the submission of a compliance document pursuant to condition 5.3.1, the Licensee is only permitted to emit wastes to the air environment from the Premises through the emission points listed in Schedule 3.

2.2.2 After the submission of a compliance document pursuant to condition 5.3.1, the Licensee is only permitted to emit wastes to the air environment from the Premises through the following emission points:
(a) those listed in Schedule 3; and
(b) the fluid bed dryer baghouse stack.

2.3 Fugitive emissions

2.3.1 The licensee shall ensure that all parts of the Premises to which vehicles have access:
(a) are either paved or sealed; or
(b) treated with water as often as is necessary; and
(c) are swept, hosed or otherwise cleared of any loose aggregate, sand, cement or other material as often as necessary, to prevent loose material adhering to vehicles and to minimise dust.

2.3.2 The Licensee shall take all reasonable and practicable measures to ensure that vehicles that either have loaded or unloaded products on the Premises do not leave the Premises unless the vehicles are deemed clean such that there is no product or dust deposited from these vehicles on Leath Road.

2.3.3 The Licensee shall ensure that when stockpiles of feed materials at the Premises have been disturbed, that the working face is stabilised to prevent and/or minimise dust emissions from the stockpiles.

3 Improvements

3.1 Improvement program

3.1.1 The Licensee shall complete the improvements in Table 3.1.1 by the date of completion in Table 3.1.1.

Table 3.1.1: Improvement program

Improvement reference	Improvement	Date of completion
IR1	The Licensee shall submit to the CEO a report that reviews and assesses air emissions from all point sources into the air. This report shall include: • process descriptions; • potential emissions from these processes; • the pollution control equipment used; • description of how the pollution control equipment controls the emissions; • how the pollution control is maintained to ensure optimal operation; • what are the probable residual emissions (i.e. after use of the relevant pollution control equipment; and • provide a map depicting significant emission points.	31/03/16
IR2	The Licensee shall submit to the CEO a Stormwater Management Plan specifically relating to the Kwinana Plant.	31/05/16
IR3	The Licensee shall submit to the CEO a Dust Management Plan specifically relating to the Kwinana Plant.	31/06/16

4 Information

4.1 Records

4.1.1 All information and records required by the Licence shall:
(a) be legible;
(b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
(c) except for records listed in 4.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
(d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
(i) off-site environmental effects; or
(ii) matters which affect the condition of the land or waters.

4.1.2 The Licensee shall ensure that:
(a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
(b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.

4.1.3 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.

4.1.4 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

4.2 Reporting

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 28 calendar days after the end of the annual period. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form[1]
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
4.1.3	Compliance	Annual Audit Compliance Report (refer to Schedule 2 and Section C)
4.1.4	Complaints summary	None specified

4.3 Notification

4.3.1 The Licensee shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form
2.1.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act
Note 2: Forms are in Schedule 2

5 Works

5.1 General works conditions

5.1.1 The Licensee shall construct the works in accordance with the documentation detailed in Table 5.1.1.

Table 5.1.1: Construction Requirements[1]

Document	Parts	Date of Document
Application Form: works approval / licence for amendment of licence L8683/2012/2, signed by Dinesh Kapadia, Operations Manager (WA) on behalf of the applicant Cockburn Cement Limited	All parts and attachments	16/11/2015
Correspondence from Cockburn Cement Limited entitled *Cockburn Cement Kwinana Plant Licence L8683/2012/2 Proposed Amendment to Licence*, signed by Dinesh Kapadia, Operations Manager WA	Page 4 (Table summary of dust control filters)	10/02/2016

Note 1: Where the details and commitments of the documents listed in condition 5.1.1 are inconsistent with any other condition of Section 5 of this licence, the conditions of this section of licence shall prevail.

5.1.2 The Licensee shall not commence or continue any works specified in condition 5.1.1 beyond 26 October 2017.

5.1.3 The fluid bed dryer baghouse dust collection unit shall meet the following specifications:
(a) a total suspended particulate concentration of less than 50 mg/m^3 (STP, dry) in exit gases during normal operating conditions; and
(b) has exit gas sampling points at locations in accordance with AS 4323.1.

5.2 Point source air emissions validation conditions

5.2.1 The Licensee shall undertake validation stack testing of air emissions from the baghouse as specified in Table 5.2.1.

Table 5.2.1: Validation monitoring of point source emissions to air

Emission point reference	Parameter	Units[1]	Frequency[2]	Method
Fluid bed dryer baghouse stack	Particulate matter	mg/m^3 g/s	Three samples not taken concurrently within four weeks of submitting a compliance document pursuant to condition 5.3.1	USEPA Method 5 or USEPA Method 17
	Oxides of nitrogen			USEPA Method 7E
	Carbon monoxide			USEPA Method 10

Note 1: All units are referenced to STP dry
Note 2: Monitoring shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production.

5.2.2 The Licensee shall ensure that sampling required under Condition 5.2.1 of the Licence is undertaken at sampling locations in compliance with the AS 4323.1.

5.2.3 The Licensee shall ensure that all non-continuous sampling and analysis undertaken pursuant to condition 5.2.1 for the parameters specified in Table 5.2.1 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

5.2.4 The Licensee shall submit a report to the CEO within four weeks of completing the point source air emissions validation specified in Table 5.2.1 providing the results of the sampling.

5.3 Reporting

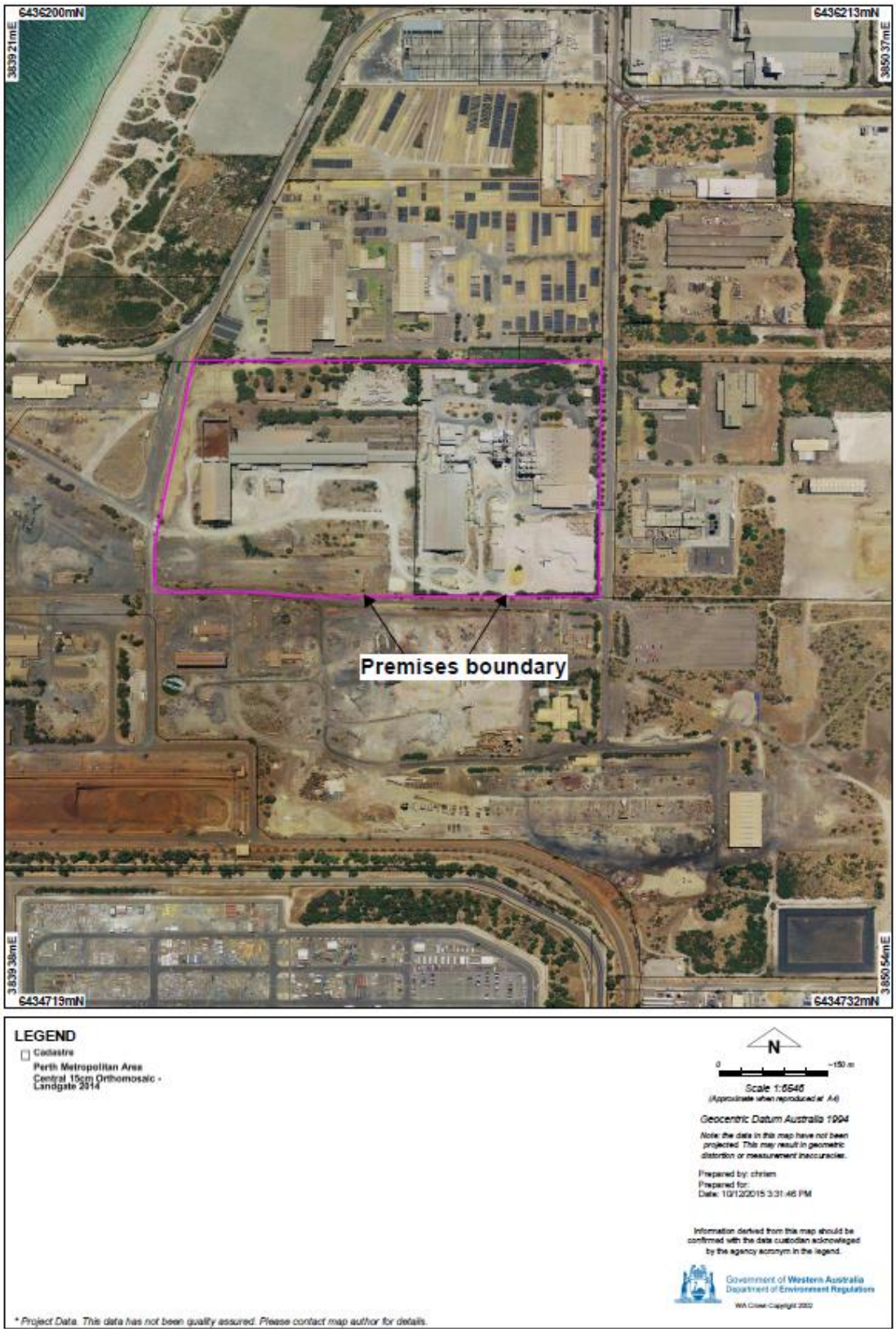
5.3.1 The Licensee shall submit a compliance document to the CEO, following the construction of the works and prior to commissioning the same.

5.3.2 The compliance document shall:
(a) certify that the works were constructed in accordance with the conditions of Section 5 of this licence;
(b) be signed by a person authorised to represent the Licensee and contain the printed name and position of that person within the company.

Schedule 1: Maps

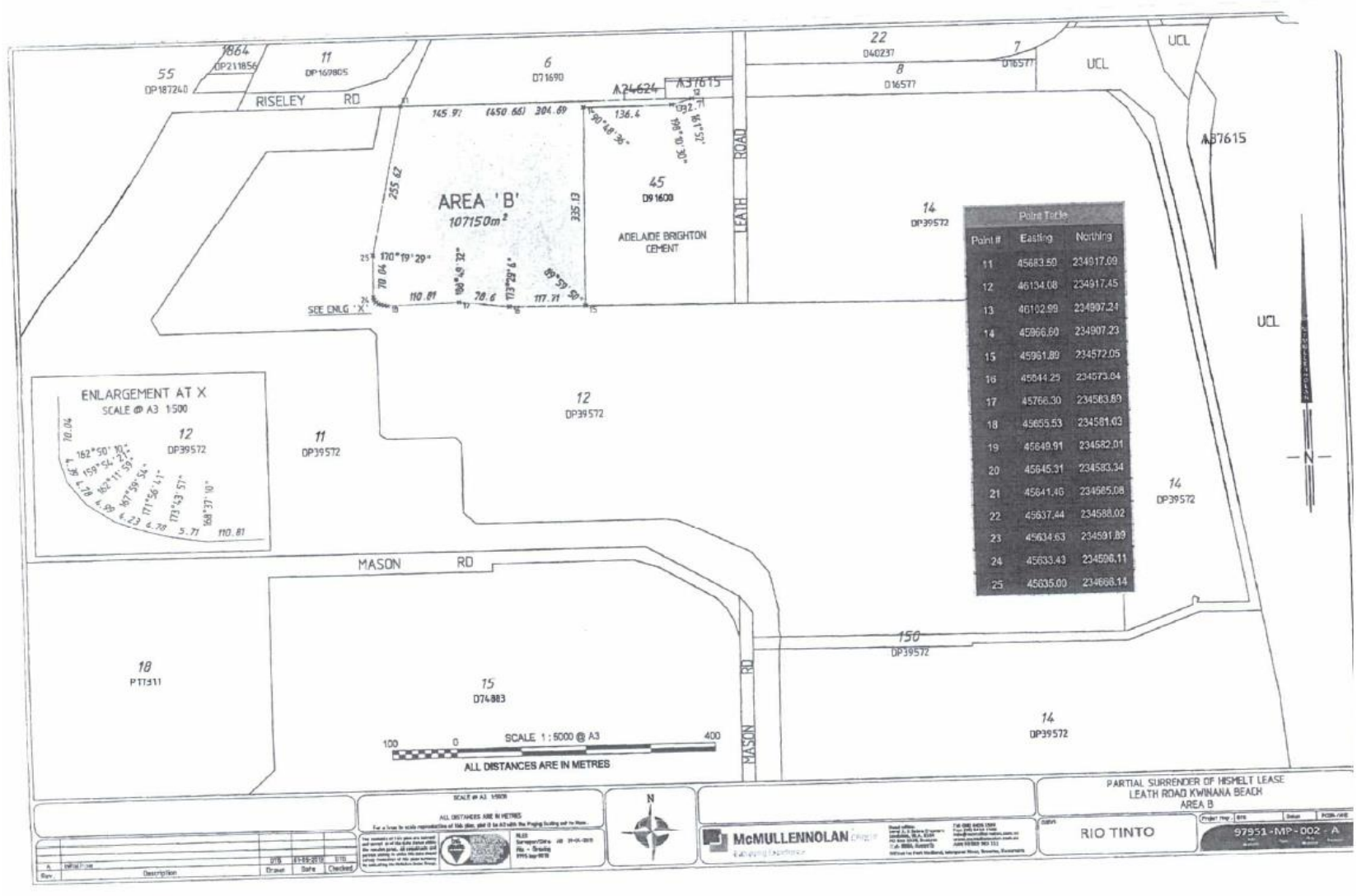
Premises map A

The Premises is shown in the map below. The pink line depicts the Premises boundary.



Premises map B

Part of Lot 12 on Plan 39572 is shown in the map below. The area marked 'Area 'B'' depicts the part of Lot 12 on Plan 39572 within the Premises boundary and is more accurately bounded by the eastings and northings in the Point Table inset.



Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A

LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name: Trading as:	ABN:
Reporting period: _____ to _____	

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of the Licence complied with within the reporting period? (please tick the appropriate box)

Yes ☐ Please proceed to Section C

No ☐ Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:

SECTION B

DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use a separate page for each Licence condition that was not complied with.

a) Licence condition not complied with:	
b) Date(s) when the non compliance occurred, if applicable:	
c) Was this non compliance reported to DER?:	
☐ Yes ☐ Reported to DER verbally Date _____ ☐ Reported to DER in writing Date _____	☐ No
d) Has DER taken, or finalised any action in relation to the non compliance?:	
e) Summary of particulars of the non compliance, and what was the environmental impact:	
f) If relevant, the precise location where the non compliance occurred (attach map or diagram):	
g) Cause of non compliance:	
h) Action taken, or that will be taken to mitigate any adverse effects of the non compliance:	
i) Action taken or that will be taken to prevent recurrence of the non compliance:	

Each page must be initialled by the person(s) who signs Section C of this AACR

Initial:

SECTION C

SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) may only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is		**The Annual Audit Compliance Report must be signed and certified:**
An individual	□	by the individual licence holder, or
	□	by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other unincorporated company	□	by the principal executive officer of the licensee; or
	□	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A corporation	□	by affixing the common seal of the licensee in accordance with the *Corporations Act 2001*; or
	□	by two directors of the licensee; or
	□	by a director and a company secretary of the licensee, or
	□	if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or
	□	by the principal executive officer of the licensee; or
	□	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A public authority (other than a local government)	□	by the principal executive officer of the licensee; or
	□	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
a local government	□	by the chief executive officer of the licensee; or
	□	by affixing the seal of the local government.

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of $50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: _____/_____/_____

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: _____/_____/_____

SEAL (if signing under seal)

Licence: L8683/2010/2 Licensee: Cockburn Cement Limited Kwinana
Form: N1 Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide. Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of: Cockburn Cement Limited	
Date	

Schedule 3: Point sources of emissions to air

Kwinana Equipment Scope					Frequency	
WA Doc No	Plant No	Plant Location	Brand	Unit Description	S	W
CKW-001	25-108	CEMENT MILL 1 - MILL VENT	LUHR	LUHR DF 3.0/2.0/2.35RR	S	W
CKW-002	25-119	CLASSIFIER CM1	LUHR	LUHR MWF 25.40.20	S	W
CKW-003	25-147	OFF SPEC SILO 1	Mikropul	CLYDE DUCON	S	W
CKW-004	25-204	CEMENT MILL 2 - MILL VENT	DCE	DCE DALAMATIC 3/4/10	S	W
CKW-005	25-215	CLASSIFIER CM2	LUHR	LUHR MWF 25.40.20	S	W
CKW-006	25-243	OFF SPEC SILO 2	LUHR	LUHR DLV 1/8/1.0/1.5RR	S	W
CKW-008	25-329	SLAG DRYING SYSTEM	GATX-FULLER DRACCO	GATX-FULLER DRACCO	S	W
CKW-009	25-338	CLINKER SILO #22 CM1	DCE	DCE DALAMATIC DLM V30/15F	S	W
CKW-010	25-342	CLINKER SILO CM2	DCE	DCE DALAMATIC DLM V30/15F	S	W
CKW-011	25-345	DRY SLAG SILO	DCE	DCE DALAMATIC DLM V30/15F	S	W
CKW-012	25-374	CLINKER SHED TUNNEL 1	DCE	DCE DALAMATIC DLM 30/15/H	S	W
CKW-013	25-386	CLINKER SHED	DCE	DCE DLM 10/10F	S	W
CKW-014	25-401	TRUCK RECEIVAL	LUHR	LUHR DV 3.0/6.0/2.35	S	W
CKW-015	25-418	INFEED CONVEYOR TRANSFER C4C6	LUHR	LUHR DFV 2.0/1.5/2.0	S	W
CKW-016	25-425	INFEED CONVEYOR TRANSFER C2C3C4	LUHR	LUHR DFV 2.0/1.5/2.0	S	W
CKW-017	25-587	GP SILO	LUHR	LUHR DFV 1.5/1.5/2.0RR	S	W
CKW-018	25-588	OFF WHITE SILO 3	LUHR	LUHR DFV 1.8/1.5/1.0RR	S	W
CKW-019	25-589	SILO 5 (MULTICELL)	LUHR	LUHR DFV 1.8/1.5/1.0RR	S	W
CKW-020	25-597	G/BLEND SILO 9	LUHR	LUHR DFV 2.5/1.5/2.0RR	S	W
CKW-021	25-774	BLENDING PLANT (WEIGH BIN)	Mideco	MELCAN MEDICO	S	W
CKW-022	25-784	DRY MIX BAGGER	DCE	DCE DALAMATIC DLM V30/15F	S	W
CKW-023	25-804	200T FEED SILO (HYDRATION PLANT)	DCE	DCE DALAMATIC V20/10F	S	W
CKW-024	25-811	HYDRATOR	CIMPROGETTI	CIMPROGETTI	S	W
CKW-025	25-816	HYDRATION MILL DISCHARGE	DCE	DCE DALAMATIC DLM V30/15H	S	W
CKW-026	25-916	CEMENT SILO 33B	DCE	DCE DALAMATIC DLM V30/15.5F	S	W
CKW-027	25-981	LIME SILO 6	DCE	DCE DALAMATIC DLM V30/15F	S	W
CKW-028	25-986	QUICK LIME SILO (#24)	DCE	DCE DALAMATIC V20/10	S	W
CKW-029	25-987	QUICK LIME SILO (#33)	DCE	DCE DALAMATIC V20/10	S	W
CKW-048	26-415	DRY MIX PLANT SILO 36 - #1	WAM	WAM	S	W
CKW-052	26-419	DRY MIX DEBAGGER	WAM	WAM	S	W
CKW-030	26-426		WAM	WAM	S	W
CKW-031	26-429		WAM	WAM	S	W
CKW-032	26-431		DCE	DCE DLM	S	W
CKW-033	26-449		DCE	DCE UMA	S	W
CKW-034	26-700	DRY MIX BIN 5G	DCE	DCE DALAMATIC DLM V 30/10	S	W
CKW-035	26-713	BAGGER 10 HMA COLLECTOR	Mikropul	HMA	S	W
CKW-053	26-719		Mikropul	104-TR10-20	S	W
CKW-036	26-752	BAGGER 10	DCE	DCE DALAMATIC DLM C 3/3/10	S	W
CKW-037	26-762	BULK BAGGER 2	Mikropul	HMA CONVERSION TO SNAP CUFF	S	W
CKW-038	26-767	BULK BAGGER 1 AIR SLIDE	DCE	DCE DALAMATIC DLM V18/15F	S	W
CKW-051	26-773	BULK BAGGER 1	DCE	DCE DLM V10	S	W
CKW-039	26-776	FLEET SILO 11 (LOW HEAT SILO 1)	LUHR	LUHR DFV 18/10/15RR	S	W
CKW-040	26-800	SURGE BIN BAGGER 6	DCE	DCE DALAMATIC V20/10F	S	W
CKW-041	26-815	BAGGER 6	DCE	DCE DALAMATIC DLM 3/4/10	S	W
CKW-042	26-817	BAG CLEANER BAGGER 6	DCE	DCE DALAMATIC DLM 1/3/10	S	W
CKW-044	26-850	SURGE BIN BAGGER 8	DCE	DCE DALAMATIC V20/10F	S	W
CKW-045	26-862	BAGGER 8	DCE	DCE DALAMATIC DLM 3/4/10	S	W
CKW-046	26-864	BAGGER 8 CONVEYOR	DCE	DCE DLM 1/3/15	S	W
CKW-1000/010	25-471	Slag Blender	MIX		S	W
CKW-1000/019		PM Debagger	WAM		S	W
CKW-10006316		PM Drymix Silo	WAM	NOT OPERATIONAL	S	W
New Fluid Bed dryer minor emission points						
		500T silo filter	FOWLEREX	PB36x1500	S	W
		300T silo filter	FOWLEREX	PB36x1500	S	W
		80T aggregate surge silo filter	FOWLEREX	PB25x1500	S	W
		80T sand surge silo filter	FOWLEREX	PB25x1500	S	W
		Bucket elevator tef chutes filter	FOWLEREX	PB42x3000	S	W
	23.163	CV03 inlet chute filter	FOWLEREX	PM16x1500	S	W
	23.270	CV04 inlet chute filter	FOWLEREX	PM16x1500	S	W
	23.210	CV05 inlet chute filter	FOWLEREX	PM16x1500	S	W
	23.210	CV05 outlet chute filter	FOWLEREX	PM16x1500	S	W

Government of Western Australia
Department of Environment Regulation

Decision Document

Environmental Protection Act 1986, Part V

Proponent: Cockburn Cement Limited

Licence: L8683/2012/2

Registered office:	Level 1 157 Grenfell Street ADELAIDE SA 5000
ACN:	008 673 470
Premises address:	Cockburn Cement Kwinana Plant Leath Road KWINANA BEACH WA 6167 Being Lot 45 on Diagram 91600 Certificate of Title Volume 2091 Folio 497; and Part of Lot 12 on Plan 39572 Certificate of Title Volume 2230 Folio 45
Issue date:	Friday, 25 September 2015
Commencement date:	Sunday, 27 September 2015
Expiry date:	Saturday, 26 September 2020

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER) has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by:	Chris Malley Licensing Officer
Decision Document authorised by:	Ed Schuller Delegated Officer

Contents

1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986.* Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

2 Administrative summary

Administrative details		
Application type	Works Approval ☐ New Licence ☐ Licence amendment ☒ Works Approval amendment ☐	
Activities that cause the premises to become prescribed premises	**Category number(s)**	**Assessed design capacity**
	43	460 000 tonnes per year
Application verified Application fee paid	Date: Date:	
Works Approval has been complied with Compliance Certificate received	Yes☐ No☐ N/A☒ Yes☐ No☐ N/A☒	
Commercial-in-confidence claim	Yes☒ No☐	
Commercial-in-confidence claim outcome	No action was required. The application was not publically advertised or published and affected sections were not included within the decision document.	
Is the proposal a Major Resource Project?	Yes☐ No☒	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the *Environmental Protection Act 1986*?	Yes☐ No☒	Referral decision No: Managed under Part V ☐ Assessed under Part IV ☐
Is the proposal subject to Ministerial Conditions?	Yes☐ No☒	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the *Environmental Protection Act 1986*)?	Yes☐ No☒ Department of Water consulted Yes ☐ No ☒	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes☒ No☐ *Environmental Protection (Kwinana)(Atmospheric Wastes) Policy 1999* ("Kwinana EPP")		
Is the Premises subject to any EPP requirements? Yes☒ No☐ The Premises is within Area A of the Kwinana EPP and is subject to ambient air quality standards and limits for total suspended particulates.		

3 Executive summary of proposal and assessment

Cockburn Cement Limited ('the Licensee') Kwinana is located on the Swan Coastal Plain, approximately 20km south of Fremantle and approximately 1km inland from the coast. The Kwinana plant is situated in the northern section of the Kwinana Industrial Area and within Area A of the *Environmental Protection (Kwinana)(Atmospheric Waste) Regulations 1992*. The closest residential area is approximately 3km south east of the plant.

The Licensee is a subsidiary of Adelaide Brighton Limited, the registered office of which is in Adelaide, South Australia. The Licensee's operations also consist of a lime and cement manufacturing plant at Munster, sea bed dredging at Woodman Point, lime manufacturing plant at Dongara, and a lime hydration plant at Kemerton. The Kwinana facility is primarily involved in the production of cement products by co-milling combinations of clinker, gypsum, limestone and slag. Lime and cement products are then packaged or dispatched in bulk. The Kwinana plant production capacity is as follows:

- hydrated lime: 50,000 tonnes per year; and
- cement: 410,000 tonnes per year.

The plant includes stockpiles, conveyors, mills, silos, packaging equipment and dust control equipment. The Licensee has an Environmental Management Plan (EMP) that also contains environmental improvement activities and plans. The environmental issues for all of the Licensee's plants state-wide are currently overseen under the umbrella EMP.

The Licensee has applied for a licence amendment to construct and operate a dryer with a nominal capacity of 60 tonnes per hour for slag with wet feed of 12% moisture. Moist granulated blast furnace slag, aggregate and sand are delivered by truck and stockpiled in close vicinity of the new dryer. The dryer works by drawing air into an enclosure heated by means of a gas burner. Wet product enters the enclosure and is fluidised by means of an oscillating floor. Hot air passes through the fluidised product driving off any moisture. Some hot air is recirculated, while the remainder is passed through a baghouse and emitted to air via a stack. The dryer will dry slag 90% of the time with the remaining 10% divided between aggregate and sand. Dried product is transported and stored in sealed silos.

The Licensee's application included a copy of the City of Kwinana planning approval. However, the application stated the Licensee was also waiting on West Australian Planning Commission (WAPC) approval under Clause 32 of the Metropolitan Regional Scheme. DER confirmed with the City of Kwinana that WAPC provided that planning approval on 11 December 2015 (Reference: 26-50207-1).

The key emission risks associated with the proposal are point source emissions to air (combustion gases), fugitive dust, noise and odour.

4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986 (*EP Act*)*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence section	**Condition number L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
General conditions	N/A	**Construction & Operation** The risk assessment of emissions associated with the proposal did not identify a need to alter the general conditions.	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015
Premises operation	N/A	**Construction & Operation** There were no premises operation conditions on the previous licence. The risk assessment of emissions associated with the proposal did not identify a need to include premises operation conditions.	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015
Emissions general	N/A	**Construction & Operation** The risk assessment of emissions associated with the proposal did not identify a need to include additional general emission conditions.	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015
Point source emissions to air including monitoring	L2.2.1 L2.2.2 L5.2.1 L5.2.2	**Construction** The risk assessment of emissions associated with the proposal did not identify any risks associated with point source emissions to air during construction. The Licensee is required to comply with the conditions of licence for existing emissions. **Operation** Emission Description *Emission:* The fluid bed dryer baghouse will have a stack. The key emission	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015 EP Act 1986 Draft *Guidance Statement: Separation Distances*, August 2015

DECISION TABLE			
Works Approval / Licence section	**Condition number L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		parameter is total suspended particulates. A gas burner is used to dry fluidised product inside an enclosure, therefore, there will also be combustion gases (CO and NOx) emitted through the baghouse stack. The Licensee provided data on air emission concentrations from similar dryer units at its other sites. The data provided by the Licensee contained limited context as to the accuracy, reliability and comparability. The stated particulate matter concentration was 0.69 mg/m^3, carbon monoxide 36.09 mg/m^3, and oxides of nitrogen 2.54 mg/m^3. These concentrations are low and the dryer is not expected to be a significant source of emissions given its stated size (nominal capacity of 60 tonnes per hour for slag with wet feed of 12% moisture). The Licensee stated there was no data available on odour emissions. However it does not expect odour to be significant based on the previous slag dryer operated at the Kwinana facility. During the draft licence comment period, the Licensee requested seven additional emission points (500T silo filter, 300T silo filter, 80T aggregate surge silo filter, 80T sand surge silo filter, dry product bucket elevator filter, CV04 inlet/outlet filters and CV05 inlet/outlet filters) be included within Schedule 3 of the licence. These emission points are new and are related to de-dusting units on conveyors, transfer points and silo vents directly associated with proposed works. In correspondence received on 10 February 2015, provided additional information to justify its claims the emission points were minor. The Bucket elevator txf chutes filter will have air flow rate that is 4.8% of the main fluid bed dryer stack (i.e. 58.3 m^3/min of 1400 m^3/min). The remainder are 1.8% or less. With filter treatment, all are designed to have a normal operating particulate emission concentration of less than 50 mg/m^3. *Impact:* Reduced local air quality and nuisance impacts. The nearest sensitive receptors are located in the suburb of Medina approximately 3 km from the premises. The premises is within Area A of the Kwinana EPP area which sets ambient standards and limits for total suspended particulates (TSP). *Controls:* The Licensee has proposed a baghouse unit to reduce particulate emissions from the fluid bed dryer. Filter performance is continuously monitored by a triboelectric-type broken bag detector. Bag performance is maintained through air pulse cleaning controlled by a differential pressure loop. There will be broken and	Kwinana EPP – Schedule 2 ambient TSP standards/limits Licensee correspondence to DER dated 10 February 2016 signed by Dinesh Kapadia, Operations Manager WA, Cockburn Cement Ltd.

DECISION TABLE			
Works Approval / Licence section	**Condition number L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		blocked bag filter alarms. The design includes a secondary cooling circuit in the final stage of the dryer to cool product. A recirculation fan moves air from the dryer via a separate filter compartment, returning to the burner as secondary air and conserving heat energy. The burner is fitted with a management system including interlocks for automatic shutdown, temperature alarms and flow measurement. As per the licensee's addendum correspondence dated 10 February 2016, other emission points from conveyors, silos and transfer points are fitted with dust control filters. Risk Assessment *Consequence:* Minor *Likelihood*: Unlikely *Risk Rating:* Moderate Regulatory Controls The fluid bed dryer baghouse stack is a new point source emission to air. Existing condition 2.2.1 has been modified to apply up until the completion of works. Condition 2.2.2 is a new condition that applies post-work to include the fluid bed dryer baghouse stack as an emission point along with the existing air emission points specified in Schedule 3. Condition 5.1.2 has been included to specify that the baghouse must achieve a total suspended particulate concentration of less than 50 mg/m^3 (STP, dry) during normal operating conditions in exit gases. This is reasonable and achievable based on DER knowledge and experience with this type of technology. The baghouse stack will be required to have exit gas sampling points at locations in accordance with AS4323.1 to facilitate validation sampling. The Licensee will be required to validate air emissions from the baghouse once operational as per condition 5.2.1 and submit a report to the CEO with the results as per condition 5.2.2. The predicted emissions concentrations combined with the	

DECISION TABLE			
Works Approval / Licence section	**Condition number L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		distance to sensitive receptors means that ongoing stack sampling is not necessary once the Licensee has validated performance. Should the results indicate otherwise, DER will reassess point source emissions to air. It is noted the existing licence has an improvement requirement to submit a report that reviews and assesses air emissions from all point sources to air. The submission of this report is expected to initiate a reassessment of all point sources emissions to air. Emission points associated with conveyors, silos and transfer points will be included in Schedule 3 and do not require specific regulatory controls as the air flow rate is minimal when compared to the fluid dryer baghouse stack and the presence of dust control filters to ensure normal operating particulate emissions less than 50 mg/m^3. These emissions points will be subject to existing condition 1.2.1 that requires pollution control and monitoring equipment to be operated and maintained to manufacturer's specifications or any relevant and effective internal management system. The risk of emissions from the new baghouse stack does not warrant the imposition of specific requirements relating to ambient standards and limits in the Kwinana EPP. Odour emissions can be adequately regulated through the general provisions of the EP Act (e.g. s49). <u>Residual Risk</u> *Consequence*: Minor *Likelihood:* Unlikely *Residual Risk Rating:* Moderate	
Point source emissions to surface water including monitoring	N/A	There were no conditions for point source emissions to surface water on the previous licence. There are no new point source emissions to surface water proposed and no identified change to the risk of point source emissions to surface water associated with the proposal.	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015

DECISION TABLE			
Works Approval / Licence section	**Condition number L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
Point source emissions to groundwater including monitoring	N/A	There were no conditions for point source emissions to groundwater on the previous licence. There are no new point source emissions to groundwater proposed and no identified change to the risk of point source emissions to groundwater associated with the proposal.	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015
Emissions to land including monitoring	N/A	There were no conditions for emissions to land on the previous licence. There are no new emissions to land proposed and no identified change to the risk of emissions to land associated with the proposal.	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015
Fugitive emissions	L2.2.1 L2.2.2 L2.2.3	**Construction** The works involve assembly of prefabricated structures. There is no identified risk of fugitive dust emissions from construction activities. Fugitive dust emissions from other parts of the premises are subject to the requirements of amended licence and also the general provisions of the EP Act. **Operation** <u>Emission Description</u> *Emission:* Fugitive dust from sources including conveyors, bucket elevator, elevator, stockpiled feed material, product storage, loading bay and trafficable dust. *Impact:* Reduced local air quality and nuisance impacts. The nearest sensitive receptors are located in the suburb of Medina approximately 3 km from the premises. *Controls:* The Licensee states that the conveyor belt, bucket elevator and elevator will be enclosed. Slag is delivered to site with an approximate moisture level of 10-12%. Stockpiled slag dehydrates and creates a crust that acts to stabilise the surface and minimise dust lift off. A front end loader removes slag from the active face which is then re-stabilised generally using the water cart maintained on site. There will be a water truck and road sweeper for general site housekeeping. The product is stored in silos and bunkers and the loading bay is enclosed. <u>Risk Assessment</u>	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015 *Guidance Statement: Regulatory Principles* *Guidance Statement: Setting Conditions*

DECISION TABLE			
Works Approval / Licence section	**Condition number L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		Consequence: Insignificant *Likelihood*: Possible *Risk Rating:* Low <u>Regulatory Controls</u> DER proposed to remove the phrase "*all reasonable and practicable measures"* from condition 2.3.2 to align the condition with its *Guidance Statement: Regulatory Principles* and *Guidance Statement: Setting Conditions*. The Licensee provided comment on this change and suggested alternative wording as summarised in Section 5, point 2. DER noted the Licensee is currently preparing a site wide Dust Management Plan (DMP) to be submitted by 31/06/2016 as required by Improvement Reference 3 (condition 3.1.1). DER also noted its proposed change to condition 2.3.2 was not directly related to the proposed slag dryer replacement project. DER has decided to retain the original pre-amendment wording interim of the Licensee's submission of the DMP. DER will then use the DMP to inform further assessment and alteration of condition 2.3.2. DER proposed a wording to condition 2.3.3 that required feed materials (slag, aggregate and sand to be unloaded and maintained in a damp (i.e. moist to the touch) state while stockpiled. The Licensee provided comment on this condition and suggested alternative wording as summarised in Section 5, point 3. DER's proposed wording was on the basis that the Licensee's application stated "*moist granulated blast furnace slag, aggregate and sand will be delivered and stockpiled in the close vicinity of the new dryer. A front end loader will transfer feed from the stockpile to feed hopper. (Note: material is wet so produces minimal dust.)*." The Licensee clarified that slag is delivered with approximate 10-12% moisture content but to maintain it in a damp state is problematic with water resources, dryer energy consumption and potentially increased combustion gases. The Licensee advised that the slag dehydrates after delivery forming a surface crust which has the effect of stabilising the surface to minimise dust. The fugitive emissions risk relates to front	

DECISION TABLE			
Works Approval / Licence section	**Condition number L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		end loader of the slag stockpile approximately every 12 hours. The Licensee focuses its dust management on the slag stockpile active face to re-stabilise the surface using a water cart after each disturbance. DER therefore revised condition 2.3.3 as follows: *"The Licensee shall ensure that when stockpiles of feed materials are the Premises have been disturbed that the working face is stabilised to prevent and/or minimise dust emissions from the stockpiles."* The condition applies to sand and aggregate stockpiles also, however DER notes that aggregate as a coarse material does not pose a risk of fugitive dust emissions. Condition 2.3.3 addresses the risk of fugitive dust emissions from stockpiles of feed materials, particularly after being disturbed. DER notes the Licensee is preparing a site wide DMP pursuant to IR3 in condition 3.1.1. Condition 2.3.3 is an interim condition pending the submission of the DMP which will allow DER to reassess fugitive emissions controls. <u>Residual Risk</u> *Consequence*: Insignificant *Likelihood:* Possible *Residual Risk Rating:* Low	
Odour	N/A	**Construction** There is no identified risk of odour emissions associated with construction. **Operation** The risk of odour emissions relates to emissions from the dryer via the baghouse stack. Refer to the point source emissions to air risk assessment where odour has been included in this assessment.	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015
Noise	N/A	**Construction** <u>Emission Description</u>	Application supporting documentation – Application

DECISION TABLE			
Works Approval / Licence section	**Condition number L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		Emission: Noise caused by the construction and assembly of prefabricated structures. *Impact:* Nuisance impact. The nearest dwellings are in the suburb of Medina approximately 3 km away. The site is located within the Kwinana Industrial Area. *Controls:* Assembly of prefabricated structures will occur during daylight hours. <u>Risk Assessment</u> *Consequence:* Insignificant *Likelihood*: Possible *Risk Rating:* Low <u>Regulatory Controls</u> No specific regulatory controls are required in the amended licence. The Licensee is required to ensure that noise emissions comply with relevant assigned noise levels as per Regulation 8 of the *Environmental Protection (Noise) Regulations 1997*. <u>Residual Risk</u> *Consequence*: Insignificant *Likelihood:* Possible *Residual Risk Rating:* Low **Operation** <u>Emission Description</u> *Emission:* Additional sources of noise from the new infrastructure once operational. Key sources include the supply fan dryer, recirculation fan, supply fan cooler and exhaust fan (all sources are below 85db(A) when measured at a distance of 1 m). *Impact:* Nuisance impact. The nearest dwellings are in the suburb of Medina approximately 3 km away. The site is located within the Kwinana Industrial Area. *Controls:* The Licensee's application stated that there will be silencers on fan outlets	form: works approval / licence, dated 16/11/2015 *Environmental Protection (Noise) Regulations 1997* – R.8 (assigned noise levels)

DECISION TABLE			
Works Approval / Licence section	**Condition number L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		and cladding and insulation on air ducting. The Licensee also indicated it will do a post-commissioning noise survey. Risk Assessment *Consequence:* Insignificant *Likelihood*: Possible *Risk Rating:* Low Regulatory Controls No specific regulatory controls are required in the amended licence. The site has no known history of noise complaints. The site is located in the Kwinana Industrial Area and the nearest sensitive receptors are at least 3 km away. The Licensee is required to comply with the relevant assigned noise levels specified in Regulation 8 of the *Environmental Protection (Noise) Regulations 1997*. Residual Risk *Consequence*: Insignificant *Likelihood:* Possible *Residual Risk Rating:* Low	
Monitoring general	L5.2.2 L5.2.3	As per the point source emissions to air risk assessment there will be requirements to undertake validation stack sampling. Consequently, conditions 5.2.2 and 5.2.3 have been included specifying general monitoring requirements for stack sampling and analysis.	N/A
Monitoring of inputs and outputs	N/A	There were no conditions for monitoring of inputs and outputs on the previous licence. The risk assessment of emissions associated with the proposal did not identify the need to include monitoring of input and output conditions.	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015
Process	N/A	There were no conditions for process monitoring on the previous licence. The risk	Application supporting

DECISION TABLE			
Works Approval / Licence section	**Condition number L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
monitoring		assessment of emissions associated with the proposal did not identify the need to include process monitoring conditions.	documentation – Application form: works approval / licence, dated 16/11/2015
Ambient quality monitoring	N/A	There were no conditions for ambient quality monitoring on the previous licence. The risk assessment of emissions associated with the proposal did not identify the need to include ambient quality monitoring conditions.	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015
Meteorological monitoring	N/A	There were no conditions for meteorological monitoring on the previous licence. The risk assessment of emissions associated with the proposal did not identify the need to include meteorological monitoring conditions.	Application supporting documentation – Application form: works approval / licence, dated 16/11/2015
Improvements	N/A	The previous licence contained improvement conditions in Table 3.1.1. These have been retained as the required dates of completion have not yet passed. The risk assessment of emissions associated with the proposal did not identify the need to include addition improvement conditions.	N/A
Information	N/A	The risk assessment of emissions associated with the proposal did not identify the need to include additional conditions in the 'information' section of the licence (Section 4).	N/A
Licence Duration	N/A	Licence L88683/2012/2 commenced on 27 September 2015 for a period of five years expiring on 26 September 2020. The licence duration has not been altered as part of this amendment.	N/A
Other	L5.1.2	DER noted the City of Kwinana had granted planning approval for the proposal. A copy of the planning approval was included in the Licensee's licence amendment application. Condition 7 of the planning approval limits its validity to 24 months and states that "if development is not completed within this period a fresh approval must be obtained before commencing or continuing with the development." As per DER's *Guidance Statement: Land use planning* (Point 4e), DER will take the duration of planning approvals into account when determining the duration of works approvals, licences or permits granted under the EP Act, consistent with DER's	*Guidance Statement: Land use planning* *Guidance Statement: Licence duration*.

DECISION TABLE			
Works Approval / Licence section	**Condition number L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		Guidance Statement: Licence duration. Condition 5.1.2 will be included to prevent commencement or continuation of works beyond 26/10/2017 (two years from the granting of the planning approval). This is consistent with City of Kwinana's planning approval and DER guidance. A reference to the licensee correspondence dated 10/02/16 was included in Table 5.1.1. Specifically Page 4 of the letter relates to additional point source emissions to air and relevant design specifications.	

5 Advertisement and consultation table

Date	Event	No.	Comments received/Notes	How comments were taken into consideration
08/01/2016	Notification of proposed licence amendments sent to Licensee.	1	The Licensee provided alternative wording for the "premises description and licence summary' section of the licence and relevant parts of the decision document. Where it states *"with a maximum rated throughput of 60 tonnes per hr"*, this should be replaced by *"with a nominal capacity of 60 tonnes per hour for the slag with wet feed of 12% moisture."* The reason being the dryer has a design capacity throughput of 60 tonnes per hour for dry slag at the outlet from the dryer. However, actual drying capacity will vary depending on the raw feed and its moisture content.	DER noted the comment and adjusted the amended licence and decision document consistent with the wording provided by the Licensee.
		2	The Licensee noted the removal of the words "take all reasonable and practical measures to" in condition 2.3.2. The Licensee is of the view this makes the condition unduly onerous and proposed an alternative wording as follows: *"The Licensee shall implement appropriate control measures and procedures to ensure that hauliers inspect and clean their vehicles to prevent any dust emissions when leaving the Premises. Conformance with these measures and procedures will be audit by the Licensee on a regular basis."*	DER met with the Licensee on 5/2/16 to further discuss its submission. For the same reason it removed the previous wording, DER did not agree with the use of similar wording such as '*appropriate measures and procedures.*' DER acknowledged that: • the Licensee is preparing a whole of site Dust Management Plan (DMP) due by 31/6/16 pursuant to Improvement Reference 3 (IR3) in condition 3.1.1; • the proposed changed to condition 2.3.2 was not directly related to the proposed slag dryer replacement project. DER has agreed to retain the original wording from the previous licence interim of the Licensee submitting the DMP. DER will review the DMP upon submission and use the information to inform changes to condition

Date	Event	No.	Comments received/Notes	How comments were taken into consideration
				2.3.2 that make the condition outcome based. DER has therefore reverted condition 2.3.2 to its original wording and updated the fugitive dust emissions risk assessment in the Section 4 decision table.
		3	The Licensee noted the changes to condition 2.3.3 including references to feed materials being damp. The Licensee advised that not all feed materials can be delivered or maintained in a moist condition as moisture is detrimental to certain feed materials. Raw materials delivered to the Premises for the dryer will be supplied in a moist condition and when initially stockpiled the material will be in a moist condition. Pending climatic conditions the stockpile will retain inherent moisture with the percentage varying at different levels below the surface. The Licensee expressed concerns with use of scheme for this purpose and did not feel it was appropriate to reticulate stockpile areas using scheme water. It does not have access to any bore water source on site. Addition of water to stockpiles ultimately results in additional fuel consumption and increased combustion gases exhausted to the atmosphere, The Licensee advised it prefers and implements other control measures to effectively control dust emissions from any stockpile. This may include use of stockpile boundary mister sprays to conglomerate any fine dust particles or enclosing stockpile storage areas. Sand and aggregate will only be stored on site in small volumes and will not be processed through the dryer within a shor timeframe. Stockpiles of this material will be regularly replenished with fresh and moist materials. These stockpiles will be low and	DER met with the Licensee on 5/2/16 to further discuss its submission. The Licensee provided clarification that slag enters site in a wet state of approximately 10-12% moisture. After deposition it dehydrates and forms a surface crust that stabilises the stockpile and minimises the risk of dust emissions. The key risk is that approximately every 12 hours it disturbs the active face to load the next batch of slag in the dryer. There is an increased risk of fugitive dust from the active face. The Licensee advised it can use the water cart to spray the active face and re-stabilise the face. On 10/2/16, the Licensee provided addendum information with an alternative condition as follows: *"The Licensee shall ensure that when stockpiles of feed materials at the Premises have been disturbed that the working face is stabilised to prevent and/or minimise dust emissions from the stockpiles."* DER further amended condition 2.3.3 consistent with this wording. DER notes the licensee is preparing a DMP in IR3 of condition 3.1.1 due by 31/06/16. Condition 2.3.3 is therefore an interim condition and once the

Date	Event	No.	Comments received/Notes	How comments were taken into consideration
			well sheltered by surrounding structures and pose minimal if any dust risk. Slay which contributes the principal stockpiled material forms a surface crust as it dehydrates. This effectively stabilises the surface and prevents material from becoming windborne. The Licensee propose maintaining the active face in a damp state when working the stockpile. The Licensee noted that all stockpile management controls will be addressed in the Dust Management Plan (IR3) and suggested the following alternative condition wording: *"The Licensee shall ensure that feed materials at the Premises are unloaded and maintained to prevent and or minimise dust emissions from the stockpiles."*	DMP is submitted, DER will review fugitive dust controls including condition 2.3.3. Condition 2.3.3 and the fugitive emissions risk assessment were updated accordingly.
		4	The Licensee requested 4 weeks to complete stack test validation of emissions rather than the 2 weeks in Table 5.2.1. New fluid bed drying system commissioning and operator training is envisaged to run for four weeks, including integration of the new dryer system into the existing plant operational control system.	DER noted the comments and did not object to the requested change. The frequency in Table 5.2.1 was changed from 2 weeks to 4 weeks.
		5	Condition 5.2.4 refers to a period of two weeks, however typically the stack monitoring consultants require 3-4 weeks to complete the testing and issue the report. The Licensee requested 4 weeks.	DER noted the comments and did not object to the requested change. Condition 5.2.4 was changed from 2 weeks to 4 weeks.
		6	The Licensee requested Schedule 3 be updated with additional minor emission points as follows: • 500T silo filter • 300T silo filter • 80T surge silo filter (aggregate) • 80 T surge silo filter (sand) • Dry product bucket elevator filter • CV04 inlet filter	DER met with the Licensee on 5/2/16 to further discuss its submission. The Licensee provided clarification that the emission points were new emission points were directly associated with the slag dryer replacement project. The points are associated with de-dusting units for conveyors, transfer points and silos. The Licensee provided addendum information

Date	Event	No.	Comments received/Notes	How comments were taken into consideration
			• CV05 inlet filter The Licensee stated that the specific brand and unit description of these filters will be established at completion of the design stage and detailed in the compliance report. The report will include an air emissions assessment on these minor emission points as per the requirements of IR1.	on 10/02/16 to further justify its claim the emission points were minor. DER noted that the emissions points had air flow rates at most 4.2% of the fluid bed dryer baghouse stack air flow. The emission points are designed to have a normal operating particulate concentration emission of less than 50 mg/m^3. DER has noted the licensee is required to review and assess air emissions from all point sources to air as per IR1 of 31/03/2016. DER has included the emission points in Schedule 3 and included a reference to page 4 (summary of dust control filters) of the licensee's correspondence dated 10/02/16 in Table 5.1.1. Once the licensee has submitted the report pursuant to IR1, DER will reassess point source emissions to air.
15/02/2016	Amended licence advertised in the *West Australian* newspaper.	N/A	N/A	N/A

6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High