



Amendment Notice 2

Licence Number	L8986/2016/1
Licence Holder	Holcim (Australia) Pty Ltd
ACN	099 732 297
File Number:	DER2016/001471
Premises	Jandabup Sand Quarry JANDABUP WA 6077 Mining tenements M70/1248 and M70/1250 360 Hawkins Road, JANDABUP WA 6077
Date of Amendment	12 January 2018

Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act) as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act and follows.

Date signed: 12 January 2018

Tim Gentle

Manager Licensing – Resource Industries

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Definitions and interpretation

Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
AACR	Annual Audit Compliance Report
ACN	Australian Company Number
AER	Annual Environment Report
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer of the Department of Water and Environmental Regulation
CEO	for the purposes of correspondence means: Chief Executive Officer Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 CLOISTERS SQUARE WA 6850 Email: info-der@dwer.wa.gov.au
CS Act	<i>Contaminated Sites Act 2003 (WA)</i>
DWER	Department of Water and Environmental Regulation As of 1 July 2017, the Department of Environment Regulation (DER), the Office of the Environmental Protection Authority (OEPA) and the Department of Water (DoW) amalgamated to form the Department of Water and Environmental Regulation (DWER). DWER was established under section 35 of the <i>Public Sector Management Act 1994</i> and is responsible for the administration of the <i>Environmental Protection Act 1986</i> along with other legislation.
Decision Report	refers to this document
Delegated Officer	an officer under section 20 of the EP Act
DMIRS	Department of Mines, Industry Regulation and Safety (from 1 July 2017 Department of Mines and Petroleum (DMP) became part of the Department of Mines, Industry Regulation and Safety – see https://publicsector.wa.gov.au/public-administration/machinery-government/2017-machinery-

	government-changes for further details)
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
Existing Licence	The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of and during this Review
Licence Holder	Holcim (Australia) Pty Ltd
m ³	cubic metres
Minister	the Minister responsible for the EP Act and associated regulations
Mining Act	<i>Mining Act 1978 (WA)</i>
MS	Ministerial Statement
mtpa	million tonnes per annum
NEPM	National Environmental Protection Measure
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Occupier	has the same meaning given to that term under the EP Act.
OEPA	Office of the Environmental Protection Authority As of 1 July 2017, the Office of the Environmental Protection Authority (OEPA), the Department of Environment Regulation (DER), and the Department of Water (DoW) amalgamated to form the Department of Water and Environmental Regulation (DWER). DWER was established under section 35 of the <i>Public Sector Management Act 1994</i> and is responsible for the administration of the <i>Environmental Protection Act 1986</i> along with other legislation.
PM	Particulate Matter
PM ₁₀	used to describe particulate matter that is smaller than 10 microns (µm) in diameter.
Prescribed Premises	has the same meaning given to that term under the EP Act.

Premises	refers to the premises to which this Amendment Notice applies, as specified at the front of this Amendment Notice.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>
UDR	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)</i>
µg/m ³	micrograms per cubic metre
µg/L	micrograms per litre

Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

This notice is limited to an amendment for the alteration to the air monitoring licence conditions and removing the noise monitoring requirements plus adjusting the annual reporting period and report due date for Jandabup Sand Quarry. No other changes to the original licence have been requested by the Licence Holder.

The following DER guidance statements have informed the decision made on this amendment;

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Decision Making (November 2016)*
- *Guidance Statement: Risk Assessment (November 2016)*
- *Guidance Statement: Environmental Siting (November 2016)*

Amendment description

On 11 April 2017, Holcim (Australia) Pty Ltd (Holcim) submitted an amendment application for the Jandabup Sand Quarry licence L8986/2016/1 issued on 29 August 2016. The application to amend the licence related to altering the air monitoring licence requirements by removing monitoring location 2 from the conditions plus removing noise monitoring requirements and completing administrative changes to the 'annual period' and annual report due date.

Current licence conditions require a second air monitoring location be equipped to provide real time air quality recordings however, the Hawkins Road monitor was initially vandalised and then stolen on 1 or 2 April 2017. On 3 April 2017, the theft of the equipment was reported to DWER. This amendment application is in lieu of replacing the stolen air monitor equipment.

The second air monitoring location is located northwest of the Holcim's workshop within the premises boundary and alongside Hawkins Road. Air quality monitoring is completed at 5 minute intervals for PM₁₀ and is required by the licence and aligns with the Jandabup quarry Environmental Management Plan dated 29 May 2016. Fugitive dust emissions are limited by the licence to not exceed 90 µg/m³ in a 24 hour average period for PM₁₀ at the workshop monitoring location. To ensure dust emissions do not exceed the licence limits, a series of text message alarm and alerts are sent to the Quarry Manager when continuous monitoring triggers were reached. The alerts to the Quarry Manager initiate management actions to control and reduce dust emissions and ensure compliance with licence limits. A typical management control is the application of water onto operational areas and infrastructure where dust lift-off occurs.

During the first six years of operation (stage 1 and 2) when operations will be closer to sensitive receptors, a screening plant "restriction area" has been agreed to as a management control with the aim being to reduce noise and dust emissions to sensitive receptors on the west side of the Premises. The screening plant "restriction area" has resulted in a separation distance between the screening plant and sensitive receptor of greater than 300 metres.

Holcim's timeframe to assess and complete the licence amendment is immediate as the current licence requires the second air monitoring location to be operating continuously. The licence does not have contingency for equipment being stolen or vandalised.

Noise monitoring required as part of the licence has been completed and the Premises is now managed by the Licence Holder pursuant to the *Environmental Protection (Noise) Regulation*

1997 (Noise Regulations). This amendment will address the termination of the noise monitoring licence condition.

The annual periods and report due dates will be aligned with Department of Mines, Industry Regulation and Safety (DMIRS) timeframes.

No other changes to the licence conditions are proposed as part of this amendment.

Other approvals

The Licence Holder has provided the following information relating to other approvals as outlined in Table 1.

The quarry is located on Mining Tenements and is exempt from planning approval under the City of Wanneroo Planning Scheme, therefore the primary approval is pursuant to the *Mining Act 1978* (Mining Act). The Quarry is situated on the Gngangara Groundwater Mound within the Gngangara Underground Water Pollution Control Area which is a priority 1 Public Drinking Water Source Protection Area (PDWSPA) where DMIRS will regulate via tenement conditions to ensure the groundwater is protected to the requirements of the DWER.

Table 1: Relevant approvals

Legislation	Number	Approval
<i>Mining Act 1978 (WA)</i> (DMIRS)	Registration ID: 57769 Mining Tenement conditions.	Approval for Mining Proposal with a Mine Closure Plan, Holcim Hawkins Road Sand Quarry Jandabup on M70/1248 and M70/1250.
<i>Country Areas water Supply Act 1947 (WA)</i> <i>Gngangara Mound Public Drinking Water Source area.</i> (Department of Water now DWER)	Registration ID: 57769 Water Management Plan	Holcim (Australia) Pty Ltd, Jandabup Sand Quarry revised Mining Proposal and Water Management Plan – M70/1124 and M70/1250.
<i>Environmental Protection Act 1986 (WA)</i> (delegated to DMIRS)	Native Vegetation Clearing Permit number 6656/1 Expires 31/03/2026 File Number A1415/201501	Approval to clear 409.5 Ha of native vegetation within M70/1248 and M70/1250.

Amendment history

Table 2 provides the amendment history for L8986/2016/1.

Table 2: Licence amendments

Instrument	Issued	Amendment
W5938/2015/1	9/6/2016	New Works Approval issued to construct the Premises
L8986/2016/1	5/9/2016	New Licence issued to Holcim to operate the Jandabup Premises with 16 year 7 month tenure expiring on 14 February 2033 (mining tenement tenure).
L8986/2016/1	12/1/ 2018	Amendment Notice – alter the air monitoring conditions to remove location 2, alter annual period and report due dates.

Location and receptors

Table 3 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises

which may be receptors relevant to the proposed amendment.

Table 3: Receptors and distance from activity boundary

Residential and sensitive premises	Distance from Prescribed Premises
<i>Residential – 7 sensitive receptors.</i>	<i>Located greater than 300 m west of the prescribed activity (category 12) and includes the screening plant restriction area.</i>
<i>Special Rural landholding – 12 sensitive receptors.</i>	<i>Located greater than 500 m and within 1000 m south of the prescribed activity boundary.</i>

Table 4 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

The mining tenements fall within the historic Gngangara Pine plantation which has been harvested during 2003 and is now fully cleared of pine trees. The land following harvesting was not de-stumped and local species of juvenile trees, shrub and grasses have regrown over the property. Mining Tenement investigations prior to quarry operations verified no rare or threatened flora, fauna or ecological communities existed at the site.

Table 4: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
<i>Gngangara Groundwater Area</i>	<i>Jandabup Sand Quarry is located in the Jandabup and Wanneroo wellfield subarea.</i>
<i>Public Drinking Water Source Areas (PDWSA's)</i>	<i>Jandabup Sand Quarry is located in the Gngangara Underground Water Pollution Control Areas.</i>
<i>Clearing Regulation - Environmentally Sensitive Areas (ESAs)</i>	<i>Jandabup Sand Quarry is located adjacent to three ESAs including Lake Jandabup located 1 km west of prescribed activity.</i>
<i>Native Title Claim</i>	<i>State and Commonwealth claims over premises include;</i> <ol style="list-style-type: none"> <i>1. Single Noongar Area 1 (Cth)</i> <i>2. Swan River People 2 (Cth)</i> <i>3. Whadjuk People (WA)</i>
<i>Bush-plan Sites</i>	<i>Jandabup Sand Quarry is located adjacent to site 93 and 106.</i>
<i>Bush-forever</i>	<i>Jandabup Sand Quarry is located 1km east and 2 km north of sites 141 & 326.</i>
<i>System 6 Conservation Reserve</i>	<i>Lake Jandabup (reference number 74) is located 1 km east of the prescribed activity.</i>
<i>Acid Sulfate Soil Risk, Swan Coastal Plain</i>	<i>Moderate to Low risk value (2) across the prescribed activity.</i>

Risk assessment

Tables 5 below describe the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. The table identifies whether noise and dust emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 5: Risk assessment for proposed amendment during operation

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
Cat 12 Screening, etc. of material:	Operation of screening plant	Noise: Associated with Screening plant and material stacker	Nearby Residents: Located greater than 300 m west of the primary activity.	Air: Wind dispersion	Health and amenity impacts	Minor	Rare	Low (On revision of Commissioning Noise Report completed in October 2016) The Delegated Officer noted that the Licence holder was required to monitoring noise during the first month of operation to validate noise predictions. A commissioning noise monitoring report was provided on 3 October 2017 confirming original predictions and compliance with the Noise Regulation during sand quarry operations through stage 1 and 2 (6 years of operation). The Delegated Officer considers condition 3.2.1 and table 3.2.1 can be deleted in their entirety as noise monitoring is specified by the revised EMP (condition 2.2.3) and will be regulated pursuant to the Noise Regulations.
		Dust: Release of PM ₁₀ particulate matter from screening						

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
		plant, material handling equipment and stockpile conveyors.						<p>during summer/autumn will continue during initial 6 years of operation.</p> <p>The Licence Holder has committed to the following management controls for dust emissions;</p> <ul style="list-style-type: none"> • Environmental Management Plan describes how dust emissions will be monitored, managed and controlled to achieve the licence limit being 90 µg/m³ during an average 24 hour period. • Adjust management to address trigger alarms at the Workshop TEOM reducing the need for the second monitor to be replaced. <p>The Delegated Officer notes the controls and considers existing conditions 2.2.1, 2.2.2, 2.2.3, 3.2.2 and Table 3.2.2 be amended to remove reference to mobile monitor location AQ2 and replace with AQ1.</p>
		<p>Local Flora species: Bushforever and Bushplan areas adjacent to the sand quarry boundary.</p>		Impact to Native vegetation	Slight	Unlikely	Low	<p>The Delegated Officer noted that the overall risk of PM₁₀ dust impacts to native vegetation is low and recognizes the nearby land uses has a 50 m buffer distance to reduce impact to Bush-plan and Bush-forever areas.</p> <p>As the overall risk rating of PM₁₀ dust impacts on local Flora species is rated as "low" no extra conditions are required on the</p>

Risk Event						Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
									<i>Licence.</i>

Decision

The Delegated Officer has determined that the key potential emissions associated with the amendment for the Jandabup Sand Quarry are noise and dust. Noise will be managed pursuant to the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations). Dust will be managed by condition of Licence L8986/2016/1.

Discontinuing of dust monitoring at Hawkins Rd will not have any significant effect as monitoring will continue at the Holcim workshop site using a TEOM with automatic feedback to the quarry manager to allow for prompt remedial management action in the event that elevated dust levels are detected. The Licence Holder has committed via the Environmental Management Plan that is also conditioned by the licence (2.2.3 and table 2.2.2) to undertake management controls to reduce emissions associated with dust.

The Delegated Officer has amended existing conditions of the licence by:

- Adjust the definition of “annual period” as requested and amend the definition of “Environmental Management Plan” to the most current approved version;
- Amending conditions 2.2.1, 2.2.2, Table 2.2.1, 2.2.3, Table 2.2.2, 3.2.2, Table 3.2.2, 4.1.2 and 4.2.1 that describe the dust monitoring and annual compliance reporting;
- Delete condition 3.2.1 and Table 3.2.1 in their entirety;
- Updating schedule 1 premises and monitoring locations map; and,
- Remove Schedule 2 page 9 to 11 being the Annual Audit Compliance Report (AACR) form as it is now available from DWER website at <https://www.der.wa.gov.au/our-work/regulatory-framework>

The Delegated Officer has also made changes to the Licence in accordance with changes to definitions plus administrative changes implemented naming the new department.

The Delegated Officer therefore considers the risk to the environment for the Premises remains unchanged and determined that the amendments assessed will not result in emissions which are unacceptable to public health or the environment and has therefore granted the Licence amendment.

Licence Holder’s comments

The Licence Holder was provided with the draft Amendment Notice on 13 November 2017. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2.

Amendment

1. Definitions of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:
‘annual period’ means the inclusive period from ~~1 July~~ 1 July ~~January~~ until ~~31 December~~ 30 June in the ~~same~~ following year;
‘Environmental Management Plan’ means the document titled “Environmental Management Plan Holcim Sand Quarry Jandabup – Tenement M70/1248 and M70/1250 ~~Rev 1 Oct 17~~”, prepared by Holcim (Australia) Pty Ltd and ~~dated 29 May 2016~~ 30 October 2017, as submitted to the CEO and includes periodic revision of the document approved by the CEO;
2. Condition 2.2.1, 2.2.2, Table 2.2.1, 2.2.3, Table 2.2.2, 3.2.2, Table 3.2.2, 4.1.2 and

4.2.1 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown below:

2.2.1 The Licensee shall not cause or allow the concentration of PM₁₀ from operations to exceed 90 µg/m³ (24-hour average) at the monitoring point reference ~~AQ2~~ **AQ1** (as depicted in the map of monitoring locations in Schedule 1).

2.2.2 The Licensee is exempt from compliance with Condition 2.2.1 if in the case of an event in Table 2.2.1 the corresponding management action is taken.

Table 2.2.1: Management actions		
Monitoring point reference	Event	Management action
AQ2 AQ1	Exceedance of the limit specified in Condition 2.2.1	The Licensee is to undertake an investigation and is exempt from compliance with condition 2.2.1 if the investigation demonstrates that the exceedance is not attributable to operations at the premises. including collection of evidence to demonstrate that the exceedance is not attributed to operations on the Premises

2.2.3 The Licensee shall ensure fugitive emissions are managed in accordance with the parts of the document specified in Table 2.2.2.

Table 2.2.2: Management plans		
Management plan reference	Parts	Date of document
Environmental Management Plan	<ul style="list-style-type: none"> Section 2.11 – Noise Section 2.11.1 Management Strategies Section 2.12 – Dust Section 2.12.1 Management Strategies Section 3.1.2 Dust Monitoring Section 3.1.3 Noise Monitoring 	May 2016 30 October 2017

3.2.2 The Licensee shall undertake the monitoring in Table 3.2.2 according to the specifications in that table.

Table 3.2.2: Monitoring of ambient air quality					
Monitoring point reference	Parameter	Units	Frequency	Averaging period	Method
AQ1² – AQ2	PM ₁₀	µg/m ³	Continuous ¹ , whilst operating in Stages 1 and 2.	24 hours	AS 3580.9.8

Note 1: Availability ≥90% of the measurement interval on a monthly basis.

Note 2: ~~Portable monitor to initially be located adjacent to TEOM at administration building prior to summer period (November 2016)~~

4.1.2 The Licensee shall **submit to the CEO by 1 August after the end of the annual period a complete an Annual Audit Compliance Report** indicating the extent to which the Licensee **Holder** has complied with the conditions of the **in this** Licence, ~~and any previous licence issued under Part V of the Act for the Premises for the previous annual period.~~

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by 1 ~~March~~ **August** in each year. 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	Parameter	Format or form ¹

-	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the annual period and any action taken	None specified
-	Monthly production throughput for the annual period for Premises category (category 12)	
Table 3.2.1	Monitoring of ambient noise levels	
Table 3.2.2	Monitoring of ambient air quality	
4.1.2	Compliance Report form	DWER website
4.1.3	Complaints summary	None specified
2.1.1 – 2.2.1	Summary of any limit exceedances specified in the Licence during the annual period.	
3.1.4	Calibration reports completed during the annual period.	

3. Condition 3.2.1 and table 3.2.1 are deleted in their entirety.

~~3.2.1 — The Licensee shall undertake the monitoring in accordance with the documents, or parts of documents, specified in Table 3.2.1 and record and investigate results that do not comply with Regulation 7 of the *Environmental Protection (Noise) Regulations 1997*.~~

Table 3.2.1: Monitoring of ambient noise levels		
Management plan reference	Parts	Date of document
Environmental Management Plan	Section 3.1.3 — Noise Monitoring	29 May 2016

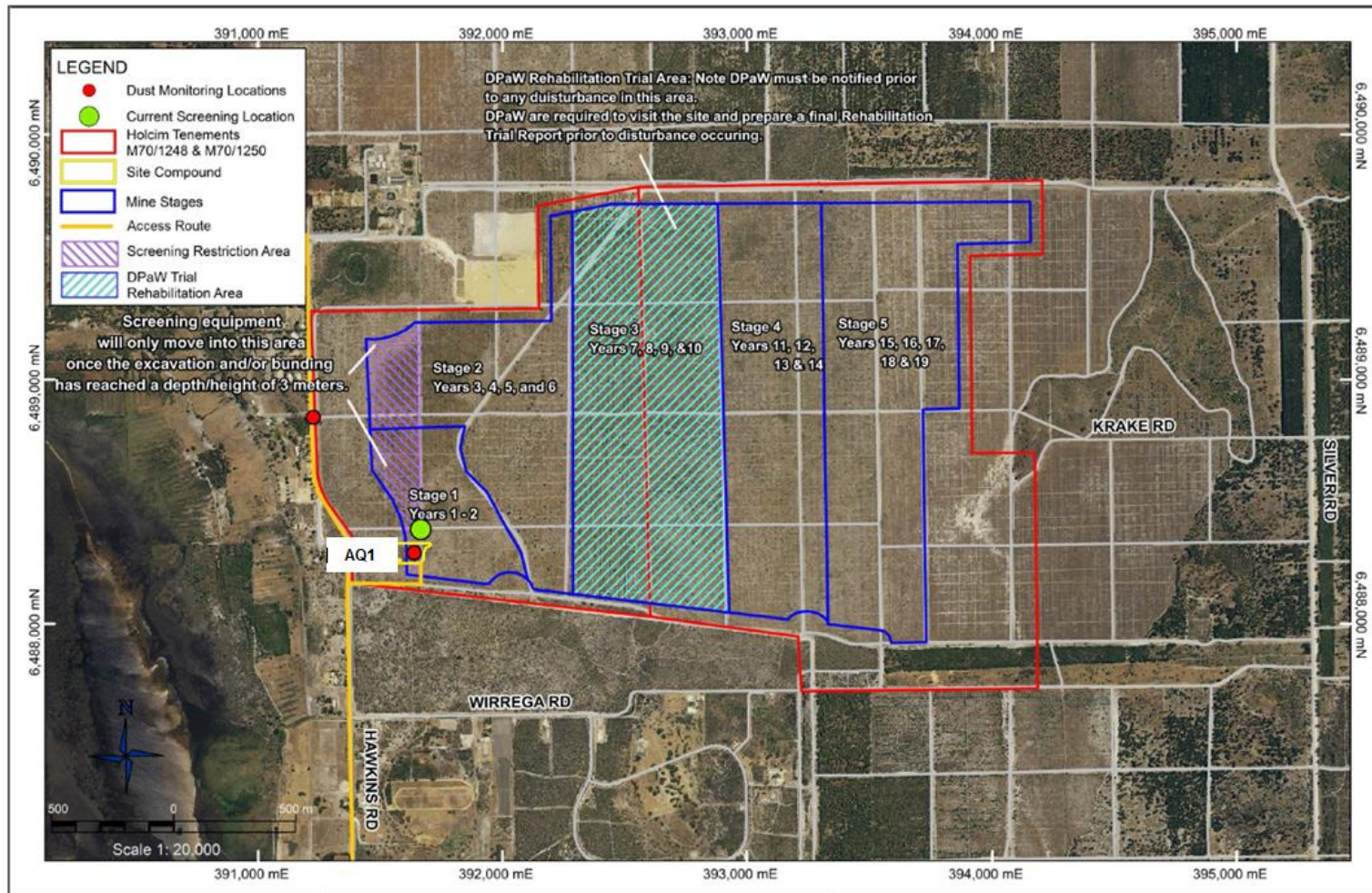
4. Replace Schedule 1: Maps with the map of monitoring locations as shown in Schedule 1 of this notice.

5. The Licence is amended by removing the Annual Audit Compliance Report template in Schedule 2. The Compliance Report template is available from the DWER's website at <https://www.der.wa.gov.au/our-work/regulatory-framework>

Schedule 1: Maps

Premises map and map of monitoring locations

The Premises is shown in the map below. The red line depicts the Premises boundary. The location of the monitoring points listed in Table 3.2.2 is shown below



Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L8986/2016/1 – Holcim (Australia) Pty Ltd issued 29 August 2016	L8986/2016/1	accessed at www.der.wa.gov.au
2	Application for amendment of Licence L8986/2016/1 dated 11 April 2017	CEO1179/17	DER records (A1411190 Att 1)
3	Supporting documentation to the application to amend Licence L8986/2016/1 dated 11 April 2017	CEO1179/17	DER records (A1411190 Att 2)
4	“Environmental Management Plan Holcim Sand Quarry Jandabup – Tenements M70/1248 and M70/1250 Rev1 Oct17” by EnviroWorks Consulting <i>dated 30 October 2017 ref: H04 – J06.</i>	EMP	DER record (A1556534)
5	“Holcim Sand Extraction Operations 360 Hawkins Road Jandabup Commissioning Noise Level Testing” by Herring Storer Acoustics <i>dated October 2016 ref:21003-1-15226-02</i>	Commissioning Noise Report	DER Record (A1556538)
6	Email titled “Category 12 Licence Amendment Request – L89862016 Jandabup Sand Quarry” dated 7 June 2017		DER records (A1453721)
7	Email titled “DER Visit Jandabup Sand Quarry” dated 16 June 2017		DER record (A1453685)
8	DER, July 2015. <i>Guidance Statement: Regulatory principles.</i> Department of Environment Regulation, Perth.	DER 2015a	accessed at www.der.wa.gov.au
9	DER, October 2015. <i>Guidance Statement: Setting conditions.</i> Department of Environment Regulation, Perth.	DER 2015b	
10	DER, November 2016. <i>Guidance Statement: Environmental Siting.</i> Department of Environment Regulation, Perth.	DER 2016a	
11	DER, November 2016. <i>Guidance Statement: Risk Assessments.</i> Department of Environment Regulation, Perth.	DER 2016b	
12	DER, November 2016. <i>Guidance Statement: Decision Making.</i> Department of Environment Regulation, Perth.	DER 2016c	

Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 13 November 2017 for review and comment. The Licence Holder responded on 11 January 2018. The following comments were received on the draft Amendment Notice.

Condition	Summary of Licence Holder comment	DER response
N/A	Licence holder noted a missing word in the Decision Report. No other comments.	Text amended accordingly.