



Amendment Report

Licence Number	L8463/2010/2
Licence Holder	Holcim (Australia) Pty Ltd
ACN	099 732 297
File Number:	DER2016/001356-1
Premises	Esperance Hard Rock Quarry 612 Myrup Road MYRUP WA 6450 Part of Lot 835 on Plan 230232 as depicted in Schedule 1 of Licence
Date of Report	30/10/2019

1. Definitions and interpretation

Definitions

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

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
Amendment Report	refers to this document
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	Chief Executive Officer Department Administering the Environmental Protection Act 1986 Locked Bag 10 JOONDALUP DC WA 6027 Telephone: (08) 6367 7000 Facsimile: (08) 6367 7001 Email: info@dwer.wa.gov.au
Delegated Officer	an officer under section 20 of the EP Act
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DER	Department of Environment Regulation (former)
DWER	Department of Water and Environmental Regulation
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 assessment
Licence Holder	Holcim (Australia) Pty Ltd
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Amendment Report applies, as specified at the front of this Amendment Report.
Revised Licence	the amended Licence issued under Part V, Division 3 of the EP Act, with changes that correspond to the assessment outlined in this Amendment Report.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>

2. Amendment Description

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend Existing Licence L8463/2010/2 granted to the Licence Holder for its Esperance Hard Rock Quarry Facility (the Premises).

The key documents and guidance statements which inform this assessment are outlined in

3. Purpose and scope of assessment

An application was received from the Licence Holder on 1 July 2019 to amend Existing Licence L8463/2010/2 to allow for the changes as outlined below:

- increase the nominated crushing and screening throughput from 60,000 tonnes per year to 250,000 tonnes per year.

Table 2 lists the documents submitted during the assessment process.

Table 2: Documents and information submitted during the assessment process

Document/information description	DWER reference	Date received
Application form and supporting documents	A1801745	1 July 2019
Environmental standards provided via email	A1820634	5 September 2019

The requested increase in production and altered operating times are considered by the Delegated Officer to present a potential change to the risk profile of emissions and discharges from the Premises. As such, the requested changes have been considered in a revised risk assessment (Table 9) in accordance with DWER's published Regulatory Framework.

The Revised Licence has been issued with additional standard conditions applied where required, amendments to conditions in accordance with the revised risk assessment and where appropriate, some conditions removed. Conditions were removed or changed where they are no longer standard conditions under DWER's published Regulatory Framework.

4. Exclusions

The extraction of raw materials including blasting is not a prescribed activity and as such is not considered in this assessment. The quarry (extraction) is regulated by the Shire of Esperance and the Extractive Industries licence 26/02/2020 is valid until 26 February 2020.

5. Premises Information

5.1. Background

Existing Licence L8463/2010/2 was issued in 2015 authorising the operation of a Category 12 screening etc. of materials at Lot 835 on Plan 230232 Esperance. The Existing Licence permits the Licence Holder to operate a crushing and screening plant with a nominated throughput of 60,000 tonnes per year. This amendment application relates to increasing this throughput to up to 250, 000 tonnes per year.

5.2. Operational aspects

The Licence Holder leases a portion of Lot 835 on Plan 230232 and operates a crushing plant at the Premises, located 10.5 kilometres north of Esperance. The Premises is located in an area of gneissic granite and provides aggregate granite to the Esperance region. The maximum

design capacity of the crushing plant is 400,000 tonnes per year and the nominated throughput is 250,000 tonnes per year. The Premises uses drilling and blasting techniques to extract rock material. The material is then crushed and screened using the mobile crushing plant and stockpiled for purchase and distribution.

The Licence Holder extracts approximately 3,000 kL of water per year from Coramup Creek for use in the quarry operations. This water is used to wash the quarry product during the crushing and screening process. Once the water has passed through the final product screen it falls through a pipe and is discharged into a concrete pond. Heavier material settles in the pond which is cleaned during shifts with a front end loader. This material is stockpiled and blended back into the scalps material.

Wastewater passes from the first shallow concrete pond through a gap in the wall of the pond into to a second deeper concrete pond which allows fine material in the water to settle. This material is removed routinely during shifts and again stockpiled until it is dry. The material is used to patch holes in roads and is also blended with scalp products. An outlet pipe in the second concrete pond allows water to flow through a drain, lined with leach drain material to a final holding dam. The water in the holding dam allows the remaining fines to settle again and water from the holding dam is recycled back through the plant.

Stormwater from around the crushing plant is directed to the holding dam.

The processing plant is approximately 680m from the nearest neighbour and approximately 200m north of Coramup Creek. The main impacts from the site are from dust, noise and vibration associated with site activities. Blasting may produce most significant noise and vibration effects of quarrying operations. Blasting, crushing and screening will occur for between 6 to 12 months each 18 months to three years on a campaign basis.

Table 3: Category 12 infrastructure

Infrastructure
Add the maximum design capacity of the Cat 12 plant and the nominated throughput here
Mobile crushing plant 1 x Finlay J-1175 Jaw Crusher or similar 1 x C-1550 Cone Crusher or similar 1 x C1540 Cone Crusher or similar 2 x Finlay 639+ Supertrak Screens
Fixed washing plant
Processed granite stockpiles
2 x Concrete ponds
Clay lined earthen holding dam

6. Legislative Context

6.1. Planning approval

Table 4 summarises the relevant planning approvals for the Premises. The existing Extractive Industry licence will expire 26 February 2020.

Table 4: Relevant approvals

Legislation	Number	Approval
Planning and Development Act 2005	10.2010.1333.1	Approval to use land for the purpose of extracting granite and to commence development of extractive industries operations and incidental office development. Approval expires 26 February 2020 and Licence Holder to submit renewal application to LGA in December 2019.
Extractive Industry Local Laws Shire of Esperance	106.2010.00000009.001	Extractive Industry Licence to extract granite at lot 835 Myrup Road, Myrup. Approval expires 26 February 2020 and Licence Holder to submit renewal application to LGA in December 2019.

6.2. Works approval and licence history

Table 5 summarises the works approval and licence history for the Premises.

Table 5: Works approval and Licence amendments

Instrument	Issued	Nature and extent of works approval, licence or amendment
L8463/2010/1	17 September 2010	Operation of a Category 12 screening etc of material premises with a production capacity of 60,000 tonnes per year.
L8463/2010/1	9 August 2013	Amendment to REFIRE format and removal of condition 2.
L8463/2010/2	3 September 2015	Licence reissue and update to current format.
L8463/2010/2	30 October 2019	Licence holder initiated amendment to increase the crushing and screening throughput from 60,000 to 250,000 tonnes per year. CEO initiated amendments include extending the expiry date to 2021 and administrative changes.

6.3. Compliance inspections and compliance history

An inspection was conducted by the then DER on 1 August 2013.

At the time of inspection the Licence Holder did not comply with Condition 2, by failing to cover conveyors and seal roads and access areas.

The non-compliance was resolved through the 2013 amendment and the Licence Holder was not required to provide a response. The inspection process was therefore closed on 6 August 2013.

7. Location and sitting

7.1. Sitting context

The Premises is approximately 4km north of the RAMSAR listed Lake Warden System Wetland and is 200m north of Coramup Creek. Properties adjacent to the Premises are predominately used for agriculture. There are also a number of crown reserves to the south east and west of the Premises.

7.2. Residential and sensitive premises

Table 6 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 6: Receptors and distance from premises boundary

Residential and sensitive premises	Distance from Prescribed Premises
Residential premises	680m West 750m Northwest 820m West 840m East 1000m South 1050m North

7.3. Specified ecosystems

Table 7 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 7: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
Coramup Creek	90m from the Prescribed Premises boundary.

8. Acoustic Assessment

An Acoustic Assessment (AA) was commissioned by the Licence Holder in July 2019 to determine the impact of noise on nearby sensitive receptors during operation of the Premises. The AA used measured sound pressures levels of similar equipment to that used on the premises. Modelling predicted noise levels would be experienced at the boundary of the nearest noise sensitive receivers, listed in Table 6. The predicted noise levels were then compared to assigned noise levels as specified in the Noise Regulations.

The modelling undertaken in the AA indicated predicted noise levels during operation of the premises are likely to exceed the assigned night time (22:00 to 07:00) noise levels at all sensitive receptors.

Noise mitigation controls are required to achieve compliance with the Noise Regulations at the residential receivers. The Licence Holder has proposed the following noise mitigation measure:

- Category 12 operations to only occur between 7am and 6pm Monday to Friday and 7am to 1pm on Saturday.

Table 8 shows the predicted noise levels for full operations, including drill rig, rock breaking, three crushers, screening plant, wash plant and truck loading, at the residential receivers.

Table 8. Calculated noise level for full operations (Applicant supplied)

Residential Premises	Calculated Noise Level (dB(A))
West	40 (45)
North West	40 (45)
North	34 (39)

East	37 (42)
South	37 (42)

() includes +5 dB penalty for a tonal component. Full operations includes drill rig, rock breaking, processing and truck loading.

9. Risk assessment

Table 9 below describes the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. The table identifies whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 9: Risk assessment for increased throughput during operation

Risk Event				Consequence rating	Likelihood rating	Risk	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Licence Holder proposed controls					
<p>Screening activities</p> <p>Crushing activities</p> <p>Unloading, loading and storage of material</p> <p>Vehicle movements</p>	Dust	<p>Air/windborne pathway causing impacts to health and amenity of closest human receptors approximately 680m west, 750m northwest, 820m west, 840m east, 1000m south and 1050m north from the premises respectively.</p>	<p>Unsealed surfaces to be wet down with water cart or truck.</p> <p>A network of water sprays will be operated at the crusher feed and conveyor transport points.</p> <p>Sprinklers will be erected and operated on the haul road as required.</p> <p>Wet all materials loaded onto trucks for export.</p> <p>Site traffic limited to 40 km/hour.</p> <p>Ongoing visual inspection for dust emissions.</p>	Minor	Unlikely	Medium	<p>The Delegated officer considers the increase in throughput does not materially change the risk of the dust emissions because the Licence Holder's proposed dust mitigation controls are likely to be sufficient at mitigating dust emissions and some will need to be included in the Licence as regulatory controls.</p>	<p><i>New conditions in Table 3 of L8463/2010/3</i></p>

Risk Event				Consequence rating	Likelihood rating	Risk	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Licence Holder proposed controls					
Screening activities Crushing activities Unloading, loading and storage of material Vehicle movements	Noise	Air/windborne pathway causing impacts to health and amenity of closest human receptors approximately 680m west, 750m northwest, 820m west, 840m east, 1000m south and 1050m north from the Premises respectively.	Operations proposed to only occur between 7am and 6pm Monday to Friday and 7am to 1pm on Saturday. Regular machinery servicing. Use of silencers and noise attenuation on construction equipment and mobile and stationary equipment with exhaust mufflers. Crushing and screening equipment and infrastructure to be fitted with best practice noise suppression features.	Moderate	Possible	Medium	The Delegated officer considers the increase in throughput will not materially change the risk of the noise emissions. This is because the Licence Holder's proposed noise mitigation controls are likely to be sufficient at mitigating noise emissions and some will need to be included in the Licence as regulatory controls. <i>Environmental Protection (Noise) Regulations 1997</i> apply at all times.	<i>New conditions in Table 3 of L8463/2010/3</i>

Risk Event				Consequence rating	Likelihood rating	Risk	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Licence Holder proposed controls					
Contaminated stormwater	Sediment laden stormwater	Overland flow of sediment laden stormwater impacting water quality and ecosystem health. Coramup Creek is 90m from the boundary.	<p>Stormwater from around the crushing plant is directed to the holding dam via the natural gradient of the property.</p> <p>A 1m high bund placed between the processing area and the creek.</p>	Minor	Rare	Low	<p>The Delegated officer considers the increase in throughput does not materially change the risk of stormwater emissions. The Licence Holder's proposed contaminated stormwater mitigation controls are likely to be sufficient at mitigating contaminated stormwater emissions.</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> apply at all times.</p>	<p><i>New conditions in Table 3 of L8463/2010/3</i></p>

10. Decision

Based on the risk assessment above, the Delegated Officer has determined that the Licence will be amended by the addition of conditions to effectively mitigate emissions resulting from an increase in throughput.

The Delegated Officer has determined that the increase in throughput does not materially alter the risk of the Premises and the change can be managed under the Existing Licence conditions in addition to the new conditions outlining site infrastructure and operational requirements.

Amendments to definitions have been undertaken by the Department to reflect updated terminology and to reflect the change in Departmental contacts.

New condition 3 Infrastructure and equipment has been added to ensure all key pollution control equipment and infrastructure are identified and maintained in good working order.

The Delegated Officer also notes Existing Licence L8463/2010/2 is due to expire on 26 February 2020. Given the amended licence has additional conditions to mitigate the risk of the increased throughput, the Delegated Officer has extended the expiry date by one year to 2021.

11. Consultation

Table 10: Summary of consultation

Method	Comments received
Local Government Authority advised of proposal (4 October 2019)	Shire of Esperance responded via email on 15 October 2019: Holcim need to make an application to the Shire of Esperance for an amendment/ extension to the existing Extractive Industry Licence, however no such application has been received at this time. The shire officers have a scheduled meeting on 22 October with Holcim to discuss application requirements.
The Licence Holder emailed the draft decision for a 21 day comment period.	The Licence Holder was provided with the draft instruments on 25 and 29 October 2019 for review and comment. The Licence Holder responded on 28 and 30 October 2019 requesting that the licence be issued as soon as possible.

12. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that the licence amendment will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

Caron Goodbourn

MANAGER, PROCESS INDUSTRIES

An officer delegated by the CEO under section 20 of the EP Act

Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L8463/2010/2	L8463/2010/2	accessed at www.dwer.wa.gov.au
2	DWER, June 2019. <i>Guideline: Industry Regulation Guide to Licencing</i> . Department of Water and Environmental Regulation, Perth.		DWER records accessed at www.dwer.wa.gov.au
3	DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.		
4	DER, February 2017. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.		
5	DWER, June 2019. <i>Guideline: Decision Making</i> . Department of Water and Environmental Regulation, Perth.		
6	DER, August 2016. <i>Guidance Statement: Licence Duration</i> . Department of Environment Regulation, Perth		