



# Amendment Notice # 1

**Licence Number** L8840/2014/1

**Licence Holder** P.M.R. Quarries Pty Ltd

**ACN** 008 866 448

**File Number:** DER2014/001883-1

**Premises** Wilga Granite Quarry  
M45/1249  
Great Northern Highway  
PORT HEDLAND WA 6721

**Date of Amendment** 4/11/2019

## 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.

**Alana Kidd**

**Manager, 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
ACN	Australian Company Number
Amendment Notice	refers to this document
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
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.
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</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
Licensee	P.M.R. Quarries Pty Ltd
Licence Holder	P.M.R. Quarries Pty Ltd
mg/L	milligram per litre
mtpa	million tonnes per annum
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Occupier	has the same meaning given to that term under the EP Act.

PMR	P.M.R. Quarries Pty Ltd
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report.
Primary Activities	refers to the Prescribed Premises activities listed on the front of this Licence as described in Schedule 2, at the locations shown in Schedule 1.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>
tpa	tonnes per annum
UDR	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)</i>

## 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.

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

- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Decision Making (June 2019)*
- *Guidance Statement: Risk Assessment (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*
- *Guideline: Industry Regulation Guide to Licensing (June 2019)*

## Amendment

### Application

The Wilga Quarry contains a resource of granite rock which is extracted using standard drill and blasting techniques, and processed onsite through a mobile crushing and screening plant. Processed rock is then stockpiled pending transport offsite for use as construction materials.

P.M.R. Quarries Pty Ltd (PMR) operates the Wilga Granite Quarry under Licence L8840/2014/1 for Category 12 prescribed activities (Schedule 1 of the *Environmental Protection Regulations 1987*).

On 24 May 2019, PMR submitted an application for a Licence amendment for relocation of the processing plant 2 kilometres (km) east with an extension of the premises boundary to account for the relocation. The new premises boundary would be the boundary of the mining tenement M45/1249.

There is no change to the approved Category 12 production design capacity of 1,000,000 tonnes per annum (tpa).

### Licence background

Licence L8840/2014/1 was issued to Pilbara Sands Holding Pty Ltd (Pilbara Sands) on 20/11/2014 to operate a crushing and screening unit within part of M45/1249.

Works Approval W5883/2015/1 was later issued to Pilbara Sands on 8 October 2015 to allow for the relocation of crushing and screening plant to a granite outcrop named 'Phase 4', two km east of the original processing area. The 'Phase 4' processing plant would be located within M45/1249, but outside of the premises boundary of the Licence.

L8840/2014/1 was transferred to PMR on 4 June 2016, and W5833/2015/1 was transferred to PMR on 6 April 2017.

W5833/2015/1 expired on 11 October 2018 with no compliance documentation having been submitted.

Table 2 summarises the EP Act Part IV licensing history for the premises prior to this application for an amendment.

**Table 2: Amendments**

Instrument	Issued	Amendment
W/5735/2014/1	20/10/2014	Works Approval for installation of crushing and screening plant in part of M45/1249 issued to Pilbara Sands Holding Pty Ltd.
L8840/2014/1	20/11/2014	New Licence issued to Pilbara Sands Holding Pty Ltd for installation of crushing and screening plant in part of M45/1249
W5883/2015/1	8/10/2015	New Works Approval issued to Pilbara Sands Holding Pty Ltd for relocation and installation of crushing and screening plant outside of the premises boundary of L8840/2014/1 to 'Phase 4' extraction area.
L8840/2014/1	4/02/2016	Licence transfer to P.M.R. Quarries Pty Ltd and amendment to format.
L8840/2014/1	19/01/2017	Licence amendment to update tenement number from M45/1219 to M45/1249
W5883/2015/1	6/04/2017	Amendment for transfer of ownership to P.M.R. Quarries Pty Ltd and to include details outlining infrastructure specifications in line with Departmental reform.  W5883/2015/1 expired 11 October 2018 with no works approval compliance document submitted.

## Non-compliance with W5833/2015/1

PMR has stated that works were constructed in accordance with W5833/2015/1 conditions 1.2.1, 1.2.2 1.2.3, but due to oversight and staff turnover, the construction compliance documents required by reporting conditions 2.1.1 and 2.1.2 were not submitted. PMR also failed to provide notification of commencement and completion of commissioning as required by condition 2.2.1, and commenced operating the crushing and screening plant at the 'Phase 4' location without a licence.

PMR recognised the non-compliances with W5833/2015/1 and on 24 May 2019 submitted the application to amend the Licence to include the operations at 'Phase 4'.

PMR submitted the compliance documentation for W5833/2015/1 on 28 June 2019.

## Operations

The mobile crushing and screening plant has been relocated approximately 2 km east of the original processing area to the 'Phase 4' area, as shown in Figure 1 below and labelled as Proposed Extraction Area.

The plant's maximum capacity is 5,000 tonnes per day. The anticipated throughput remains unchanged from the existing licence at 2,700 tonnes per day with an estimated total of 1,000,000 tonnes per annum (tpa).

The crushing and screening plant is located outside of the premises boundary of the existing Licence but remains within mining tenement M45/1249. The Licence will be amended so that the premises boundary is the boundary of mining tenement M45/1249.

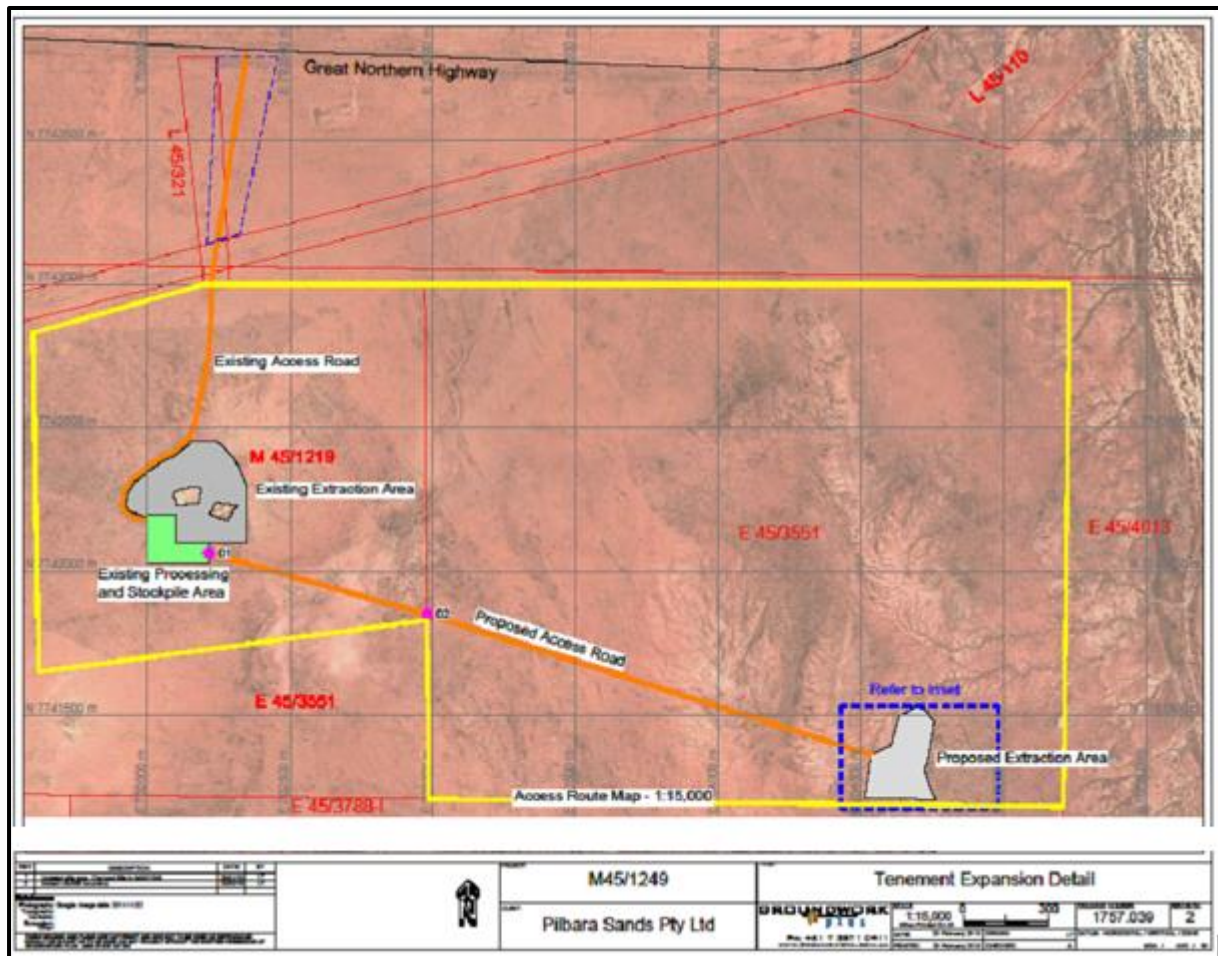
In accordance with W5833/2015/1, water diversion bunds have been constructed to divert clean surface water around excavation and processing areas, and a sediment basin (or 'sump') has been constructed within the excavation area to contain potentially contaminated surface run-off. W5833/2015/1 required the sediment basin to be constructed with a minimum 2 m vertical separation to maximum seasonal groundwater and adequately sized to contain rainfall from a 1 in 10 year Annual Recurrence Interval 2 hour duration storm event, consistent with *Water Quality Protection Note 15*.

There is no storage of hydrocarbons at the Phase 4 area. Refueling is by mobile truck. Site facilities such as the workshop and crib rooms remain at the original location.

Dust suppression is primarily by:

- water sprays installed on the processing plant;
- water cart employed when visually deemed required;
- restriction of vehicle speeds; and
- covering of loads of materials.

**Figure 1: Location of 'Phase 4' (labelled as Proposed Extraction Area)**



## Location and receptors

The Wilga Granite Quarry is located on tenement M45/1249, approximately 25 km east of Port Hedland in the Tappa Tappa region of Western Australia.

Table 3 below lists the distance to the closest sensitive land uses.

**Table 3: Sensitive land users and distance from activity boundary**

Residential and sensitive premises	Distance from the activity
Great Northern Highway	Approximately 800 m north of the premises and 2 km north of the 'Phase 4' extraction area,
Marta Marta community	Approximately 7 km to the north-east
Town of Port Hedland	Approximately 27 km west

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

**Table 4: Environmental receptors and distance from activity boundary**

Environmental receptors	Distance from Prescribed Premises
Minor, non-perennial watercourse (tributary of Tabba Tabba Creek)	Within the south-east corner of the premises
Tabba Tabba Creek	Approximately 1 km to the east of the premises boundary
Groundwater of beneficial use. Bores located within 6 km of the Premises recorded TDS between 517 to 1350 mg/L (from the DWER WIN data base)	Premises located within the Pilbara Groundwater Area and Pilbara Surface Water area proclaimed under the <i>Rights in Water Irrigation Act 1914</i> (RIWI Act).  Depth to groundwater is unknown at the Premises; however according to the DWER WIN data base, several bores located within 6 km of the Premises recorded static water level (SWL) between 5.36 m to 13.5 m.

## Part IV of the EP Act

The premises is not subject to Ministerial Conditions.

## Other Approvals

Other approvals relevant to the premises, are listed below in Table 5.

**Table 5: Other approvals**

Legislation	Number	Approval	Decided
<i>Mining Act 1978</i>	71618	Wilga Quarry Mining Proposal M45/1249, L45/321, L45/385 & L45/390	05/07/2019
	56333	Wilga Granite Quarry Mining Proposal - Phase 5 V3	27/03/2017
	54800	Wilga Granite Quarry Mining Proposal - Site Expansion - Addendum v.6.	29/06/2015
	54514	M45/1249 Mining Proposal - Phase 4	20/04/2015
	53281	Wilga Granite Quarry Mining Proposal Site Expansion	13/05/2015

## Consultation

The Shire of Port Hedland was notified of the Application by DWER on 25 June 2019. No comments were received.



## Risk assessment

Table 6 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 6: Risk assessment for proposed amendments during operation**

Risk Event						Consequence rating	Likelihood rating	Risk	Reasoning for Risk and regulatory controls
Source/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
Cat 12: Screening etc. of material  (1,000,000 tonnes per annual period)	Operation of crushing and screening plant and movement of product at 'Phase 4' area.	Dust	Great Northern Highway approximately 2 km north of 'Phase 4'	Air	Health and amenity impacts	N/A	N/A	N/A	<p>Scale of operations is relatively small.</p> <p>Distance to sensitive land users is sufficient to inform the risk of dust and noise emissions as not foreseeable.</p> <p>The general provisions of the EP Act are applicable.</p> <p>The <i>Environmental Protection (Noise) Regulations 1997</i> are applicable.</p>
		Noise	Marta Marta community 7 km to the north-east		Amenity impacts				
		Diesel/oil spill	Soils/ground and groundwater with beneficial use	Direct discharge and infiltration through ground	Hydrocarbon contamination of soils and groundwater	Minor  Low level on site impacts	Unlikely  Impacts will probably not occur	Medium	<p>Groundwater in the area is of beneficial use.</p> <p>Depth to groundwater recorded at bores located 6 km away is 5.36 m to 13.5 m. Depth to groundwater at the premises assumed similar, but is essentially unknown.</p> <p>No bulk hydrocarbons are stored at 'Phase 4', but machinery will be operated and refueled with potential for spills. Impact confined to the spill zone.</p> <p>An amendment will be made to the Licence to require spill kits to</p>



Risk Event						Consequence rating	Likelihood rating	Risk	Reasoning for Risk and regulatory controls
Source/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
									be available on site.  <i>The Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA) are applicable.</i>
		Stormwater (sheetwash and stormwater contaminated with sediment)	Minor, non-perennial watercourse (tributary of Tabba Tabba Creek) at the south east of the premises.  Tabba Tabba Creek 1 km east.  Riparian and terrestrial vegetation	Direct discharge along flow path.	Erosion  Increase in turbidity of surface water and deposition of sediment, smothering of terrestrial and riparian vegetation.	Minor  Low level on site impacts	Unlikely  Impacts will probably not occur	Medium	Distance to Tabba Tabba Creek is 1 km. Other than the ephemeral tributary of the Creek at the SE of the premises, there are no other sensitive environmental receptors within 1 km of the premises.  Groundwater is assumed to be approximately 5 to 12 m below ground level.  The stormwater management infrastructure constructed under the requirements of the expired W5883/2015/1 contribute to lowering the risk. These conditions will be replicated on the Licence and provide for movement of the sump and bunding as required, as extraction progresses.
		Turbid water from the sediment basin	Groundwater of beneficial use.	Direct discharge from sump if intersects groundwater	Contamination of groundwater				

## Decision

The Delegated Officer has determined to grant the amendment, with conditions amended as outlined by Table 6. The premises boundary is amended to include processing of extracted material at 'Phase 4', and is the boundary of the mining tenement M45/1249.

Definitions are updated as required.

## Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 6 September 2019 for a 21 day comment period. The Licence Holder had no comments and waived the 21 day comment period.

## Amendment

1. The premises address on the front cover of the Licence is amended as shown by the deletion of the text shown in strikethrough below:

**Premises address:** Wilga Granite Quarry  
Great Northern Highway  
Port Hedland WA  
~~Being part Tenement M45/1249 as depicted in Schedule 1~~

2. Definitions of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

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

'CEO' for the purpose of correspondence means;

~~Chief Executive Officer  
Department Division 3 Part V *Environmental Protection Act 1986*  
Locked Bag 33 Cloister Square  
PERTH WA 6850  
Email: [info@der.wa.gov.au](mailto:info@der.wa.gov.au)~~

**Director General**  
**Department administering the Environmental Protection Act 1986**  
**Locked Bag 10**  
**Joondalup DC WA 6919**  
**[info@dwer.wa.gov.au](mailto:info@dwer.wa.gov.au)**

3. The Licence is amended by the insertion of the following Condition 1.2.2 as shown in the bold underline text below:

**1.2.2 The Licensee must ensure that spill kits are made available for use on the premises.**

3. The Licence is amended by the insertion of the following Condition 1.2.3 as shown by the bold underline text below:

**1.2.3 The Licensee must ensure that the infrastructure listed in Table 1.2.1 is constructed and maintained to manage stormwater, and in accordance with the corresponding requirement set out in Table 1.2.1.**

<b>Table 1.2.1: Infrastructure requirements</b>	
<b><u>Stormwater infrastructure</u></b>	<b><u>Construction and operational requirements</u></b>
<b><u>Diversion bunding</u></b>	<b><u>Constructed and maintained to divert overland stormwater flow from clean catchments around and away from the area of extraction.</u></b>
<b><u>Sediment basin</u></b>	<b><u>Constructed within the area of extraction to collect stormwater.</u></b>  <b><u>Constructed with a minimum of 2 metres vertical separation to the maximum seasonal groundwater table.</u></b>  <b><u>Constructed with a minimum storage capacity to contain rainfall drained from the extraction area for a 1 in 10 Average Recurrence Interval, 2-hour duration storm event.</u></b>

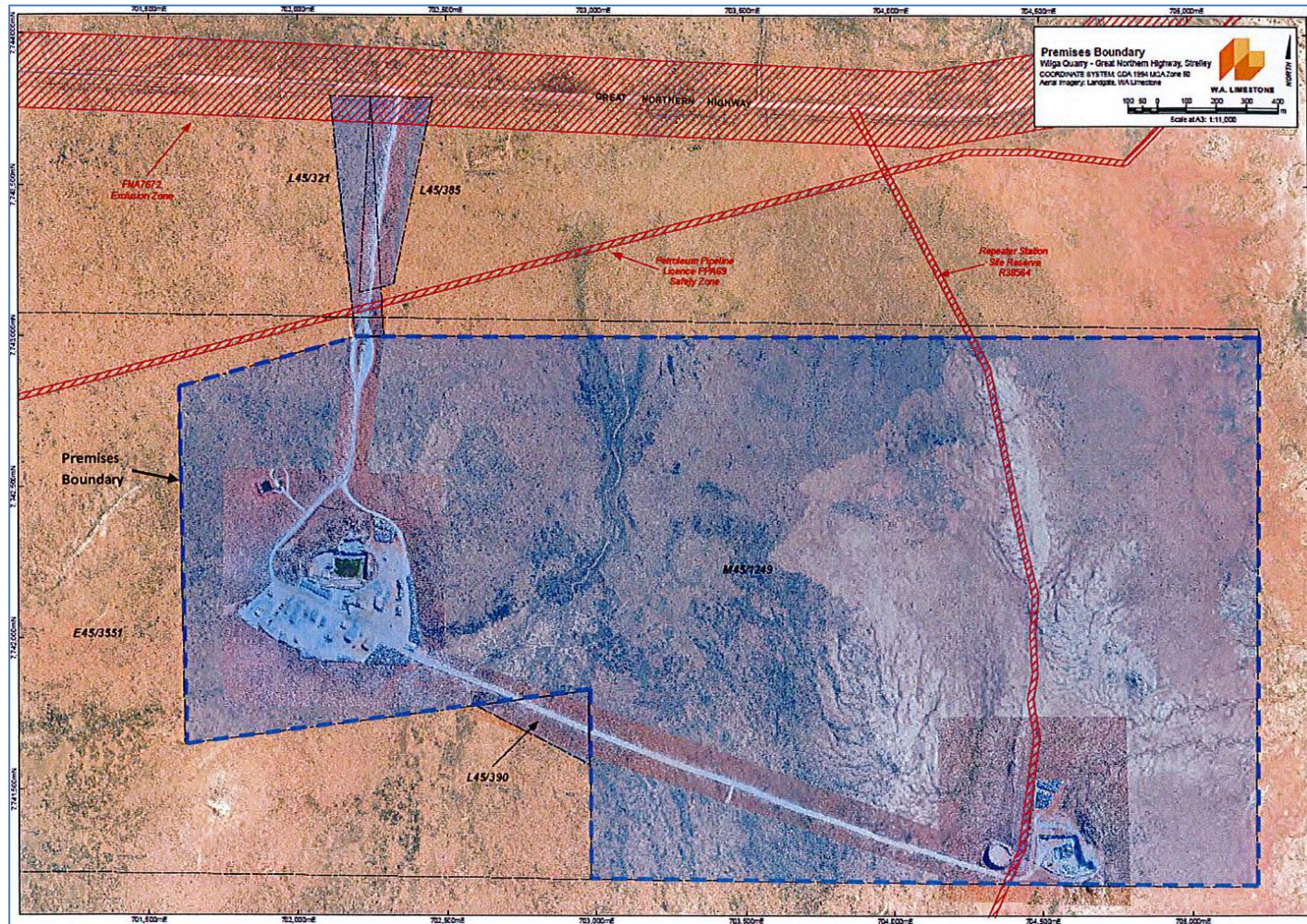
4. The Licence is amended by the deletion of the text shown in strike through below and deletion of the premises map, and the insertion of the text shown in bold underline below and the insertion of the premises map below.



## Premises maps

The Premises is shown in the map below. The yellow line depicts the Premises boundary part of Mining Tenement M45/1249. The area shaded dark grey shows the extent of the Quarry Pit and the green-shaded area the Processing and Stockpile area.

**The Premises boundary is defined by the blue dashed line in the map below, being the boundary of mining tenement M45/1249**



Licence: L8840/2014/1

## Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L4432/1989/14 – Wilga Granite Quarry	Existing licence	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
	Works Approval W5883/2015/1	W5883/2015/1	DWER records (DER2015/000659-1)
2	Letter and Application Form, both signed on 16 May 2019, received by email from Peter Male, WA Limestone, on 24 May 2019	Application	DWER records (A1791416)
3	Email <i>RE: Licence Amendment Application - WA Limestone Wilga Quarry L8840</i> with attachment titled <i>WA Limestone Wilga Quarry Compliance Document W5883</i> . From Peter Male, WA Limestone, 28 June 2019	W5833/2015/1 Compliance document	DWER records (A1801048)