



Licence

Environmental Protection Act 1986, Part V

Licensee: Hanson Construction Materials Pty Ltd

Licence: L4414/1968/12

Registered office: Level 6,
35 Clarence Street
SYDNEY NSW 2000

ACN: 009 679 734

Premises address: Hanson Construction Materials Pty Ltd - Herne Hill/Red Hill
RED HILL
WA 6056
Being Lot 11 on Plan 3047 as depicted in Schedule 1

Issue date: 25 September 2015

Commencement date: 1 October 2015

Expiry date: 30 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
12	Screening, etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	50 000 tonnes or more per year	2 000 000 tonnes per annual period

Conditions

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

.....
Danielle Eyre
Officer delegated under section 20
of the *Environmental Protection Act 1986*



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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

Hanson Construction Materials Pty Ltd (Hanson) operates Red Hill Quarry (quarry), extracting hard rock from the Red Hill pit. The quarry lies within an area of the Darling Scarp on the eastern outskirts of the Perth Metropolitan Area. The quarry and associated infrastructure are located on Lot 11 Toodyay Road between Susannah Brook and Toodyay Road. The quarry was opened and brought into production in 1998. The lot is located in the City of Swan and covers an area of 800 hectares.

Hanson has been operating at Lot 11 since 1963, currently as the Red Hill Pit and previously as the Herne Hill Pit. The Herne Hill Quarry (located to the south west of Red Hill Quarry within the Premises boundary) has not been operated since 1998 and has been retained pending decisions on future land use.

The Red Hill Quarry was granted approval to be constructed and operated by the Minister for the Environment on 4 December 1991, in Ministerial Statement 199. An extension to the Red Hill Quarry to the north and west was approved by the Minister on 9 October 2012 in Ministerial Statement 912.

The quarry extracts and processes granite and diorite. Product stockpiles are retained on site. The main emissions from the quarrying activities are dust, noise and potential impact to surface water from site run-off. Dust monitoring is carried out visually and directional dust collectors allow for the analysis of dust and verification of Hanson's dust mitigations methods. These include regular watering of all roads, sprinkler systems in the stockpile areas and automatic water sprays on the crushers. Noise sources on site include drilling and blasting, crushing and screening and transport movements. Plant is fitted with shields or noise suppression devices and trucks are restricted to designated roads. Blasts are designed and monitored by consultants to ensure they meet the requirements of the Environmental Protection (Noise) Regulations 1997.

Susannah Brook traverses through the Premises from east to west. A number of other water courses/ drainage lines are located on the Premises and also drain to the west including Strelly Brook which feeds into a tributary of Jane Brook. Two water storage dams, the north water storage dam and the south west storage dam are located on the Premises. These dams collect stormwater run-off and also provide water for dust suppression. No water discharges occur from the south west storage dam. The north water dam overflows in times of high rainfall to Susannah Brook. A surface water monitoring program and management plan is in place under Ministerial Statement 199 to monitor and manage the water quality of these discharges.

This Licence is the successor to licence L4414/1968/11 and is a new template licence. It includes an increase to the processing capacity authorised under category 12 and minor corrections.

The licences and works approvals issued for the Premises since 01/01/2010 are:



Instrument log		
Instrument	Issued	Description
L4414/1968/11	01/10/2010	Licence re-issue
L4414/1968/12	24/09/2015	Licence re-issue; increase to premises capacity

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 January until 31 December in the same year;

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*;

'AS/NZS 5667.4' means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made*;

'AS/NZS 5667.6' means the Australian Standard AS/NZS 5667.6 *Water Quality – Sampling – Guidance on sampling of rivers and streams*;

'AS/NZS 5667.10' means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters*;

'averaging period' means the time over which a limit is measured or a monitoring result is obtained;

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

'CEO' for the purpose of correspondence means;

Chief Executive Officer
Department Administering the Environmental Protection Act 1986
Locked Bag 33
CLOISTERS SQUARE WA 6850
Telephone: (08) 9333 7510
Facsimile: (08) 9333 7550
Email: info@der.wa.gov.au

'Dust Management Plan' means the Hanson Construction Materials (2013) *Dust Management Plan – Red Hill Quarry*, version 2.05, 22 March 2013.

'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 L4414/1968/12 and issued under the Act;

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

'NATA' means the National Association of Testing Authorities, Australia;



'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'normal operating conditions' means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring;

'Premises' means the area defined in the Premises Map 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; and

'spot sample' means a discrete sample representative at the time and place at which the sample is taken.

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the 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.

1.3 Premises operation

1.3.1 The Licensee shall ensure that waste material is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 1.3.1.

Table 1.3.1: Containment infrastructure

Storage vessel or compound	Material	Requirements
North Water Storage Dam	Site run-off/ Stormwater	None specified
South West Water Storage Dam	Site run-off/ Stormwater	

1.3.2 The Licensee shall ensure that the drainage on the Premises is managed such that all contaminated stormwater generated on the Premises is retained on the Premises.

1.3.3 The Licensee shall ensure that vehicle washdown areas are equipped with oil/water interceptors and provisions to ensure detergent or solvent contaminated waters are retained on the Premises.



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 surface water

- 2.2.1 The Licensee shall ensure that where waste is emitted to surface water from the emission points in Table 2.2.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 2.2.1: Emission points to surface water

Emission point reference and location on map of emission points	Description	Source including abatement
L1	North Water Storage Dam overflow discharge to Susannah Brook	Stormwater via settlement/retention dam

2.3 Fugitive emissions

- 2.3.1 The Licensee must ensure fugitive dust emissions are managed in accordance with the parts of the document specified in Table 2.3.1.

Table 2.3.1: Management Plans

Management Plan Reference	Parts	Date of Document
Dust Management Plan – Red Hill Quarry	Sections 3.4 – 3.6	22/03/2013 Version 2.05

2.4 Noise/Vibration

- 2.4.1 The licensee shall manage emissions such that they do not cause an exceedance of the limits in Table 2.4.1.

Table 2.4.1: Noise/Vibration Emission limits

Monitoring point reference	Parameter	Limit (including units)	Reference period
Blast monitoring site at eastern end of William Street, 2.4km east of the Premises	Peak particle velocity	10 mm/sec	Any single blast
		Not more than one blast shall exceed 5 mm/sec	Any 10 consecutive blasts (regardless of interval between blasts)



3 Monitoring

3.1 General monitoring

- 3.1.1 The licensee shall ensure that:
- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
 - (b) all surface water sampling is conducted in accordance with AS/NZS 5667.4, AS/NZS 5667.6 or AS/NZS 5667.9 as relevant; and
 - (c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.
- 3.1.2 The Licensee shall ensure that monthly monitoring is undertaken at least 15 days apart.
- 3.1.3 The Licensee shall record production or throughput data and any other process parameters relevant to any non-continuous or CEMS monitoring undertaken.
- 3.1.4 The Licensee shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications and the requirements of the Licence.
- 3.1.5 The Licensee shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

3.2 Ambient environmental quality monitoring

- 3.2.1 The Licensee shall undertake the monitoring in Tables 3.2.1 and 3.2.2 according to the specifications in that table and record and investigate results that do not meet any limit specified.

Table 3.2.1: Monitoring of ambient surface water quality

Monitoring point reference and location	Parameter	Limit	Units	Averaging period	Frequency
W1, W3, W4, W5, W6	Total suspended solids (TSS)	-	mg/L	Spot sample	Monthly (July – October)
	Total dissolved solids	-	mg/L		
	Chloride	-	mg/L		
	pH	-	-		
	Oil & Grease	-	mg/L		
W2	Total suspended solids	TSS at site W1 + 80	mg/L		
	Total dissolved solids	-	mg/L		
	Chloride	-	mg/L		
	pH	-	-		
	Oil & Grease	-	mg/L		

Table 3.2.2 Monitoring of ambient noise/vibration quality

Monitoring point reference	Parameter	Units	Reference period	Frequency
Blast monitoring site at eastern end of William Street, 2.4km east of the Premises	Air-Blast	dB	For each blast	
	Peak particle velocity	mm/sec		



4 Improvements

4.1 Improvement program

- 4.1.1 The Licensee shall complete the improvements in Table 4.1.1 by the dates of completion in Table 4.1.1.

Table 4.1.1: Improvement program

Improvement reference	Improvement	Date of completion
IR1	The Licensee shall investigate suitable methods for monitoring the volume of discharge from emission point L1 identified in Schedule 1. The Licensee shall submit to the CEO a report that proposes a suitable means for accurately monitoring the volume of discharge from emission point L1 including the proposed timeframe for installing any required equipment or infrastructure.	31/01/2016
IR2	The Licensee shall construct the required equipment or infrastructure and implement the proposed monitoring of discharge from emission point L1.	In accordance with the timeframe in the report provided by IR1.

5 Information

5.1 Records

- 5.1.1 All information and records required by the Licence shall:
- be legible;
 - if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - except for records listed in 5.1.1(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
 - for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - off-site environmental effects; or
 - matters which affect the condition of the land or waters.
- 5.1.2 The Licensee shall ensure that:
- 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
 - 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.
- 5.1.3 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.
- 5.1.4 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.

5.2 Reporting

- 5.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by the 1 February each year. The report shall contain the information listed in Table 5.2.1 in the format or form specified in that table.



Table 5.2.1: 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
-	Annual throughput recorded in tonnes	Tonnes per annum
Table 2.3.1	Particulates, management actions	None specified
Table 2.4.1, 3.2.2	Air-blast, peak particle velocity (blast monitoring data)	None specified
Table 3.2.1	Total suspended solids, total dissolved solids, chloride, pH, oil & grease	None specified
5.1.3	Compliance	Annual Audit Compliance Report (AACR)
5.1.4	Complaints summary	None specified

Note 1: Forms are in Schedule 2

- 5.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:
- any relevant process, production or operational data recorded under Condition 3.1.3; and
 - an assessment of the information contained within the report against previous monitoring results and Licence limits.

- 5.2.3 The Licensee shall submit the information in Table 5.2.2 to the CEO according to the specifications in that table.

Table 5.2.2: Non-annual reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEO's request	As received by the Licensee from third parties

5.3 Notification

- 5.3.1 The Licensee shall ensure that the parameters listed in Table 5.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 5.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
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
3.1.5	Calibration report	As soon as practicable.	None specified

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



Schedule 1: Maps

Premises map

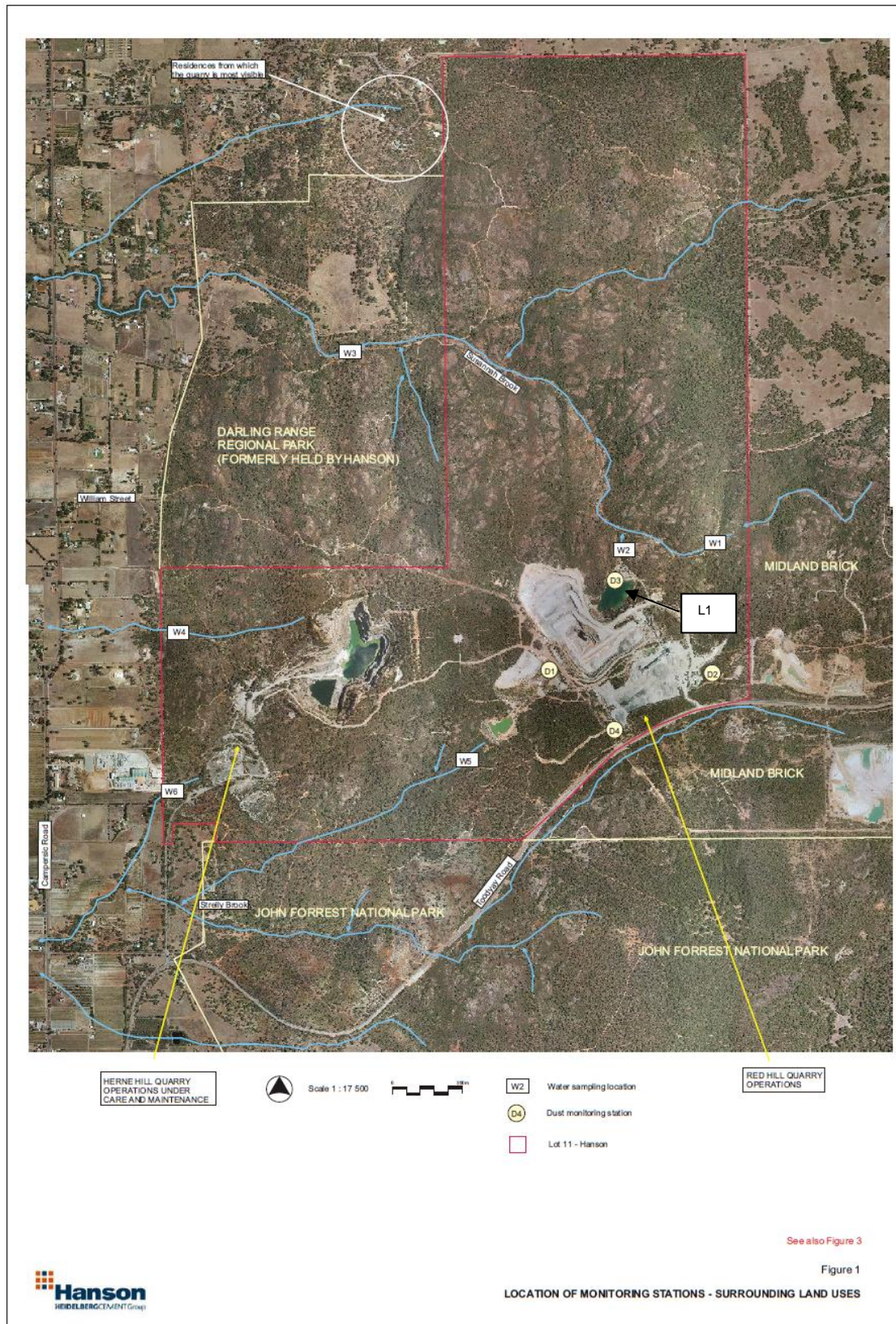
The Premises is shown in the map below. The red line depicts the Premises boundary.





Map of emission and monitoring points

The location of the emission point defined in Table 2.2.1, and the location of the monitoring points defined in Table 3.2.1 are shown below.



The location of the storage areas defined in Table 1.3.1 are shown below.





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: L4414/1968/12	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?:	
<input type="checkbox"/> Yes <input type="checkbox"/> Reported to DER verbally Date _____ <input type="checkbox"/> Reported to DER in writing Date _____	<input type="checkbox"/> 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	<input type="checkbox"/> <input type="checkbox"/>	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	<input type="checkbox"/> <input type="checkbox"/>	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	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; 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)	<input type="checkbox"/> <input type="checkbox"/>	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	<input type="checkbox"/> <input type="checkbox"/>	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: ____/____/____

SEAL (if signing under seal)

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: ____/____/____



Licence: L4414/1968/12
Form: N1

Licensee: Hanson Construction Materials Pty Ltd
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 Hanson Construction Materials Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Licensee: Hanson Construction Materials Pty Ltd

Licence: L4414/1968/12

Registered office: Level 6,
35 Clarence Street
SYDNEY NSW 2000

ACN: 009 679 734

Premises address: Hanson Construction Materials Pty Ltd - Herne Hill/Red Hill
RED HILL
WA 6056
Being Lot 11 on Plan 3047 as depicted in Schedule 1

Issue date: 25 September 2015

Commencement date: 1 October 2015

Expiry date: 30 September 2020

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Louise Lavery
Licensing Officer

Decision Document authorised by: Danielle Eyre
Delegated Officer



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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 <input type="checkbox"/> New Licence <input checked="" type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	12	2 000 000 tonnes per year
Application verified	Date: 19/08/2015	
Application fee paid	Date: 31/08/2015	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input checked="" type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: 199, 912



	EPA Report No:510, 1381
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes include details of which EPP(s) here.	
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.	

3 Executive summary of proposal and assessment

Hanson Construction Materials Pty Ltd (Hanson) operates Red Hill Quarry (quarry), extracting hard rock from the Red Hill pit. The quarry lies within an area of the Darling Scarp on the eastern outskirts of the Perth Metropolitan Area. The quarry and associated infrastructure are located on Lot 11 Toodyay Road between Susannah Brook and Toodyay Road. The quarry was opened and brought into production in 1998. The lot is located in the City of Swan and covers an area of 800 hectares.

Hanson has been operating at Lot 11 since 1963, currently as the Red Hill Pit and previously as the Herne Hill Pit. The Herne Hill Quarry (located to the south west of Red Hill Quarry within the Premises boundary) has not been operated since 1998 and has been retained pending decisions on future land use.

The Red Hill Quarry was granted approval to be constructed and operated by the Minister for the Environment on 4 December 1991, in Ministerial Statement 199. An extension to the Red Hill Quarry to the north and west was approved by the Minister on 9 October 2012 in Ministerial Statement 912.

The quarry extracts and processes granite and diorite. Product stockpiles are retained on site. The main emissions from the quarrying activities are dust, noise and potential impact to surface water from site run-off. Dust monitoring is carried out visually and directional dust collectors allow for the analysis of dust and verification of Hanson's dust mitigations methods. These include regular watering of all roads, sprinkler systems in the stockpile areas and automatic water sprays on the crushers. Noise sources on site include drilling and blasting, crushing and screening and transport movements. Plant is fitted with shields or noise suppression devices and trucks are restricted to designated roads. Blasts are designed and monitored by consultants to ensure they meet the requirements of the *Environmental Protection (Noise) Regulations 1997*.

Susannah Brook traverses through the Premises from east to west. A number of other water courses and drainage lines are located on the Premises and also drain to the west including Strelly Brook which feeds into a tributary of Jane Brook. Two water storage dams, the north water storage dam and the south west storage dam are located on the Premises. These dams collect stormwater run-off and also provide water for dust suppression. No water discharges occur from the south west storage dam. The north water storage dam overflows in times of high rainfall to Susannah Brook. A surface water monitoring program and management plan is in place under Ministerial Statement 199 to monitor and manage the water quality of these discharges.

This is partial decision document for licence L4414/1968/12 and is a new template licence. It includes an increase to the processing capacity authorised under category 12, which was applied for on 24 July 2014 and a subsequent application to increase the authorised production or design capacity to 2 million tonnes, applied for on 16 April 2015.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, 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 W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Premises Category	N/A	The Premises category throughput has been increased by 100% from 1 000 000 tpa to 2 000 000 tpa. There is no associated change in the quarry footprint approved under Ministerial Statements 705 (Herne Hill - not currently operating) and 912 (Red Hill) or additional/upsized processing sections or equipment.	
Premises operation	L1.3.1	The storage dams have been listed on the Licence as containment infrastructure.	General provisions of the <i>Environmental Protection Act 1986</i>
	L1.3.2, L1.3.3	These conditions have not been reassessed. L1.3.2 replaces previous licence condition W1 and L1.3.3 replaces previous condition W4.	
Emissions general	L2.1.1	Descriptive limits will be set through condition 2.6.2 of the licence and therefore condition regarding recording and investigation of exceedances of limits has been included.	N/A
Point source emissions to surface water including monitoring	L2.2.1, L3.2.1	L2.2.1 and L3.2.1 replace previous conditions W2(a)- W2 (e) and W3. The previous reference to monitoring bores has been corrected to refer to monitoring sites. L3.2.1 requires that water quality parameters are monitored, but a compliance inspection on 20 January 2015 has identified that there is no requirement to monitor the volume discharged which is required to assess the impacts, including total nutrient loading, on the receiving environment. A requirement to investigate and report to DER on potential methods for monitoring the volume of discharge has been added to table 4.1.1 (IR1 and IR2).	Hanson (2013) Summary of <i>Water Management – Hanson Red Hill Quarry</i> , June 2013
Fugitive emissions	L2.3.1, Table 2.3.1	DER's assessment and decision making is included in Appendix A	Refer Appendix A
Noise	L2.4.1, L3.2.2	These conditions have not been reassessed. L2.4.1 replaces previous licence	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		conditions N2(a)and N2(b). L3.2.2 replaces previous conditions N1(a),N3(a), N3(b)	
Information	L5.2.1	An addition to the reporting requirements for the AER is to provide a summary of failures or malfunctions of pollution control equipment and any environmental incidents.	General provisions of the <i>Environmental Protection Act 1986</i>
Licence Duration	N/A	The licence has been reissued for a five year period.	N/A



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
31/08/2015	Application advertised	None received	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



Appendix A

Fugitive dust emissions

Normal Operations

Emission Description

Emission: Fugitive dust from quarry operations, specifically from:

- physical disturbance of the land surface during clearing
- drilling and blasting of rock to establish the quarry face and enable extraction of rock
- vehicle movement on unsealed roads and movement of heavy vehicles with uncovered loads
- crushing and screening to grade aggregate
- wind erosion of dry exposed surfaces such as open pit areas, stockpiles, unsealed roads.
- movement of trucks offsite

Impact: Reduced local air quality. Dust can smother vegetation and create nuisance at nearby residences. The nearest sensitive receptor as identified by Ministerial Statement 912 is approximately 1100m from the most western boundary of the pit. This sensitive receptor location is identified in Figure 3 of Ministerial Statement 912. The closest residence is approximately 2km to the north. There are also adjacent businesses and activities that contribute to dust in local area.

Controls: The Licensee has developed and implemented dust suppression methods, including induction training for employees, visual observations and management procedures, use of water carts, automatic sprinkler systems, enclosed conveyors and bag houses on the screening plant. A progressive rehabilitation program is also in progress to minimise total area of exposed surfaces.

Risk Assessment

Consequence: Moderate

Likelihood: Possible

Risk Rating: Moderate

Regulatory Controls

A Dust Management Plan has been developed by the Licensee to manage dust emissions. This dust management plan prescribes targets for overall performance, management actions, a monitoring program and contingency actions to be adopted in the event of adverse results from the monitoring program. The monitoring program includes visual observations as well as a directional deposition dust monitoring program at 4 sites on the Premises and ambient air quality monitoring at the sensitive receptor nominated in Ministerial Statement 912. This monitoring program is conducted in accordance with Australian Standard AS/NZS3580.9.11:2008 and DER dust guidelines.

This dust management plan is required to be implemented as per condition L2.3.1. Data from the monitoring program is required to be reported through the Annual Environmental Report as per condition L5.2.1.

Ministerial Statement 912 condition 9-2 imposes an ambient air quality target concentration for PM10 at the western sensitive receptor location as nominated in Figure 3 of Ministerial Statement 912.

Residual Risk Rating

Consequence: Moderate

Likelihood: Possible

Risk Rating: Moderate



References

AS/NZS 3580.9.11:2008 *Methods for sampling and analysis of suspended particulate matter – PM10 beta attenuation monitors*

DER (2011) *A guideline for managing the impacts of dust and associated contaminants from land development sites, contaminated sites remediation and other related activities*, January 2011

Hanson Construction Materials (2013) *Dust Management Plan – Red Hill Quarry*, version 2.05, 22/3/2013, Sections 3.4 – 3.6

Ministerial Statement 912