



Mr Jamie Bartlett
Operations Director
North West Quarries Pty Ltd
PO Box 828
KARRATHA WA 6714

Dear Mr Bartlett

ENVIRONMENTAL PROTECTION ACT 1986: LICENCE GRANTED
Premises: Red Hill Sand Quarry, M47/1495, MUNDABULLANGANA WA 6721
Licence Number: L8822/2014/1

A licence under the *Environmental Protection Act 1986* (the Act) has been granted for the above premises. The Department of Environment Regulation will advertise the issuing of this licence in the public notices section of *The West Australian* newspaper.

The licence includes attached conditions. Under section 58(1) of the Act, it is an offence to contravene a condition of a licence. This offence carries a penalty of up to \$125,000 and a daily penalty of up to \$25,000.

In accordance with section 102(1)(c) of the Act, you have 21 days to appeal the conditions of the licence. Under section 102(3)(a) of the Act, any other person may also appeal the conditions of the licence. To lodge an appeal contact the Office of the Appeals Convenor on 6467 5190 or by email at admin@appealsconvenor.wa.gov.au.

Where a licence is issued for more than one year it requires payment of an annual fee and will cease to have effect if the fee is unpaid. It is the occupier's responsibility to lodge a fee application and pay the annual fee in sufficient time to avoid incurring a late payment fee and for processing to be completed before the licence anniversary date.

If you have any queries regarding the above information, please contact Haley Brunel on 9182 2034.

Yours sincerely

Alana Kidd
Officer delegated under section 20
of the *Environmental Protection Act 1986*

Thursday, 5 March 2015



Licence

Environmental Protection Act 1986, Part V

Licensee: North West Quarries Pty Ltd

Licence: L8822/2014/1

Registered office: 5 Corokia Way
BIBRA LAKE WA 6163

ACN: 136 680 450

Premises address: Red Hill Sand Quarry
Mining Lease M47/1495
MUNDABULLANGANA WA 6721
As depicted in Schedule 1.

Issue date: Thursday, 5 March 2015

Commencement date: Monday, 9 March 2015

Expiry date: Sunday, 8 March 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	100,000 tonnes per annual period

Conditions

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

.....
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 works with the business owners, community, consultants, industry and other representatives 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

North West Quarries Pty Ltd (North West Quarries) operates the Red Hill Sand Quarry on mining lease M47/1495. The site operates on a supply and demand basis with an anticipated life of 20 years. The works approval for the quarry was issued to Quarrytech Consulting Pty Ltd, however, ownership of the quarry and the mining lease has recently been transferred to North West Quarries.

The quarry is located in the Pilbara region of Western Australia, approximately 73 km south west of the Port Hedland Airport and adjacent to the North West Coastal Highway. The nearest sensitive receptor is the Whim Creek Hotel, located 28 km west of the quarry. The hotel is currently closed, however there are plans to reopen it later in 2015.

The quarry site is located within the Port Hedland Coast River Basin, which consists of six major rivers and numerous minor rivers and creeks. One of these minor creeks, the East Peawah River is located on the western boundary and the south-west corner of the site, flowing north towards the ocean. The two sand dunes to be mined are located immediately east of the river.

There is no excavation within two metres of the banks of the river, or within two metres of the drip line of any significant riparian vegetation. No excavation is to be undertaken within three metres of the water table or below the clay river bed layer. Groundwater at the site is estimated to be approximately 12 metres below ground level, fluctuating with the seasons. There is no waste generated from the mining process at the site, screened material either being sold, or used for rehabilitation.

The site will have a maximum capacity of 100,000 tonnes per annual period, however the throughput is expected to be 50,000 tonnes per year. The mining operation is a shallow open cut sand mine. The mine is operated on a campaign basis throughout the dry season only, due to the difficulty involved with mining damp sand.

Sand is excavated by loader and excavator and placed directly onto the screening plant which is located directly opposite the excavation area. Sand is screened into three different sizes; less than 8 mm, between 8 – 50 mm (which will be stockpiled for sale); and greater than 50 mm which is stockpiled on site for future rehabilitation works. Sand is transported from site in road trains along the haul road to the highway for delivery to the customer.

The infrastructure is located in the south east corner of the site and includes:

- processing area;
- office and crib room;
- ablution block (self contained);
- workshop;
- laydown area;
- stockyard; and
- access and haul road.

Power onsite is supplied by a 10 kilovolt-ampere (kVa) self banded diesel generator. Initial estimates indicate that the site will use approximately 600 litres (L) of diesel per day and 6 L of top up oil and grease to power the loader, dump truck, screening plant, vehicles and generator. A workshop on site provides daily servicing,



however, all major servicing is completed off site in South Hedland. A mobile fuel truck brings fuel to site and no fuel is stored on site outside of vehicles.

This Licence is for the operation of a new facility established under works approval W5681/2014/1. Compliance documents as required by the works approval conditions were received by DER on 10 February 2015.

The licences and works approvals issued for the Premises since 06/11/2014 are:

Instrument log		
Instrument	Issued	Description
W5681/2014/1	6/11/2014	Works approval
L8822/2014/1	5/3/2015	New Licence

Severance

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

END OF INTRODUCTION



Licence conditions

1 General

1.1 Interpretation

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

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

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

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

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

'CEO' for the purpose of correspondence means;

Manager Licensing (Resources North)
Department of Environment Regulation
Locked Bag 33
Cloisters Square
PERTH WA 6850
Telephone: (08) 9333 7510
Facsimile: (08) 9144 1118
Email: industry.regulation@der.wa.gov.au;

'code of practice for the storage and handling of dangerous goods' means document titled "Storage and handling of dangerous goods: Code of Practice" published by the Department of Mines and Petroleum, as amended from time to time;

'controlled waste' has the definition in *Environmental Protection (Controlled Waste) Regulations 2004*;

'dangerous goods' has the meaning defined in the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*;

'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. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

'fugitive emissions' means all emissions not arising from point sources identified in Sections 2.2, 2.3, 2.4 and 2.5;

'Licence' means this Licence numbered L8822/2014/1 and issued under the Act;

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

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



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

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

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

1.2 General conditions

1.2.1 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.

1.2.2 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.

1.2.3 The Licensee, except where storage is prescribed in section 1.3, shall ensure that environmentally hazardous materials are stored in accordance with the code of practice for the storage and handling of dangerous goods.

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

1.2.5 The Licensee shall:

- (a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and
- (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.

Note1: The *Environmental Protection (Unauthorised Discharges) Regulations 2004* make it an offence to discharge certain materials into the environment.

1.3 Premises operation

There are no specified conditions relating to Premises operation in this section.



2 Emissions

2.1 General

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

2.2-2.4 Point source emissions to air, surface water and groundwater

There are no specified conditions relating to point source emissions to air, surface water or groundwater in these sections.

2.5 Emissions to land

There are no specified conditions relating to emissions to land in this section.

2.6 Fugitive emissions

2.6.1 The Licensee shall use all reasonable and practical measures to prevent and where that is not practicable to minimise dust emissions from the Premises.

2.6.2 The Licensee shall ensure that no visible dust generated by the activities of the Premises crosses the boundary of the Premises.

2.7 Odour

There are no specified conditions relating to odour in this section.

2.8 Noise

There are no specified conditions relating to noise in this section.

3 Monitoring

There are no specified conditions relating to monitoring in this section.

4 Improvements

There are no specified improvement conditions in this section.

5 Information

5.1 Records

5.1.1 All information and records required by the Licence shall:

- (a) be legible;
- (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- (c) except for records listed in 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
- (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.



- 5.1.2 The Licensee shall ensure that:
- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
 - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 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 31 July 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
5.1.3	Compliance	Annual Audit Compliance Report (AACR)
5.1.4	Complaints summary	None specified
-	Measures taken to suppress dust	

Note 1: Forms are in Schedule 2

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.	N1
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution	Part B: As soon as practicable	

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

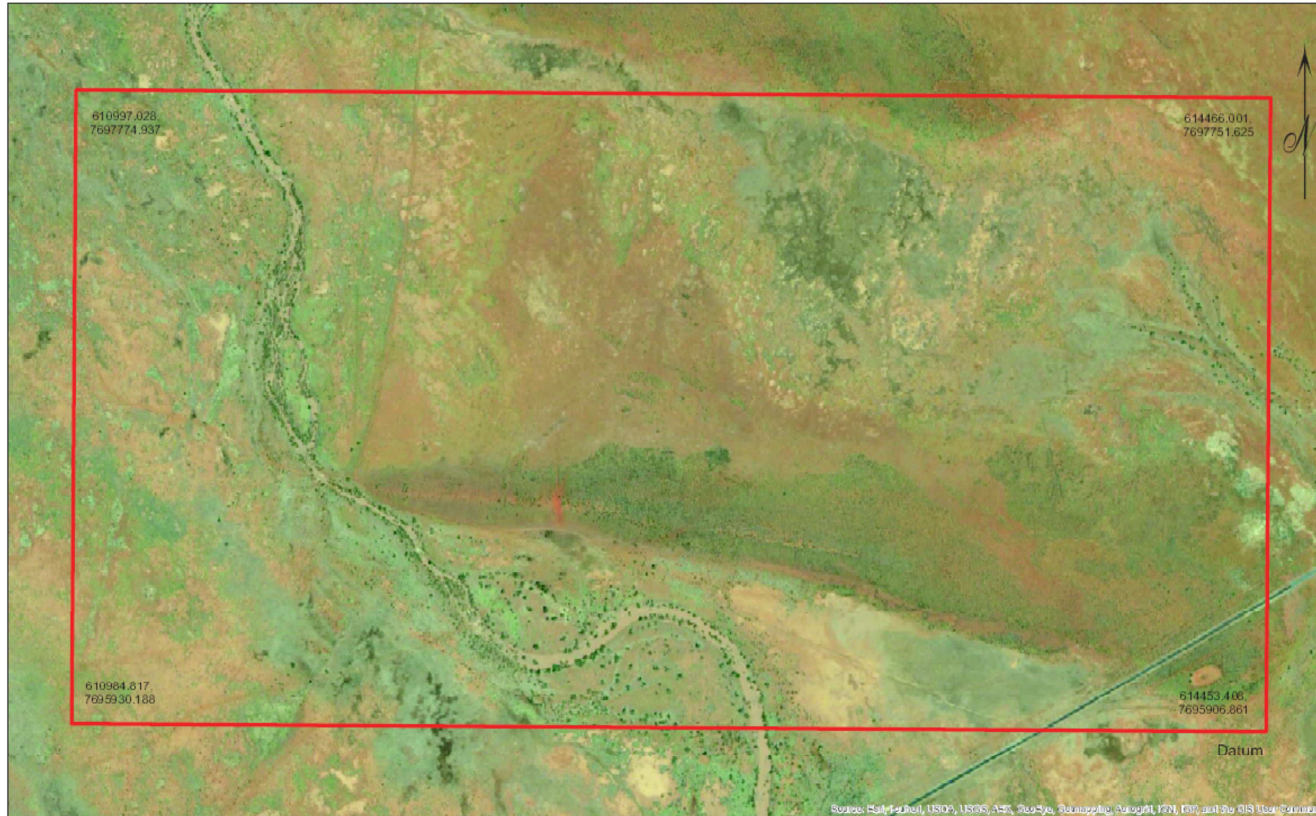
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

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



SURVEYGROUP
Herdman Park Professional Centre
Unit 9, 59 Walters Drive
Osborne Park, WA 6017
(08) 9443 8900

Peewah Mining Lease - M47/1495
Red Hill
SGNWQ14003

Coordinate System: GDA 1994 MGA Zone 50
Projection: Transverse Mercator
Datum: GDA 1994
False Easting: 500,000.0000
False Northing: 10,000,000.0000
Central Meridian: 117.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter



Schedule 2: Reporting & notification forms

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

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name:	ABN:
Trading as:	
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) must 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: _____

SIGNATURE: _____

NAME:
(printed) _____

NAME:
(printed) _____

POSITION: _____

POSITION: _____

DATE: ____/____/____

DATE: ____/____/____

SEAL (if signing under seal)



Licence: L8822/2014/1
 Form: N1

Licensee: North West Quarries Pty Ltd
 Date of breach:

Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.

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	

Notification requirements for any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution	
Date and time of event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken , or intended to be taken, to stop any emission	
Description of the failure or accident	



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 North West Quarries Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: North West Quarries Pty Ltd

Licence: L8822/2014/1

Registered office: 5 Corokia Way
BIBRA LAKE WA 6163

ACN: 136 680 450

Premises address: Red Hill Sand Quarry
Mining Lease M47/1495
MUNDABULLANGANA WA 6721

Issue date: Thursday, 5 March 2015

Commencement date: Monday, 9 March 2015

Expiry date: Sunday, 8 March 2020

Decision

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

Decision Document prepared by: Teresa Wilkie/Haley Brunel
Licensing Officer

Decision Document authorised by: Alana Kidd
Manager Licensing



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1 Purpose of this Document

This decision document explains how DER has assessed and determined the application for a works approval or licence, 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.

Works approval and licence conditions

DER has three types of conditions that may be imposed on works approvals and licences. They are as follows;

Standard conditions (SC)

DER has standard conditions that are imposed on all works approvals and licences regardless of the activities undertaken on the Premises and the information provided in the application. These are included as the following conditions on works approvals and licences:

Works approval conditions: 1.1.1-1.1.4, 1.2.1, 1.2.2, 5.1.1 and 5.1.2.

Licence conditions: 1.1.1-1.1.4, 1.2.1-1.2.4, 5.1.1-5.1.4 and 5.2.1.

For such conditions, justification within the Decision Document is not provided.

Optional standard conditions (OSC)

In the interests of regulatory consistency DER has a set of optional standard conditions that can be imposed on works approvals and licences. DER will include optional standard conditions as necessary, and are likely to constitute the majority of conditions in any licence. The inclusion of any optional standard conditions is justified in Section 4 of this document.

Non standard conditions (NSC)

Where the proposed activities require conditions outside the standard conditions suite DER will impose one or more non-standard conditions. These include both premises and sector specific conditions, and are likely to occur within few licences. Where used, justification for the application of these conditions will be included in Section 4.



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	100,000 tonnes per annual period
Application verified	Date: 26 May 2014	
Application fee paid	Date:	
Works Approval has been complied with	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
Compliance Certificate received	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome	N/A	
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 type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <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 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

North West Quarries Pty Ltd (North West Quarries) operate the Red Hill Sand Quarry on mining lease M47/1495. The site operates on a supply and demand basis and is expected to operate for the next 20 years.

The quarry is located in the Pilbara region of Western Australia, approximately 73 km south west of the Port Hedland Airport, adjacent to the North West Coastal Highway. The nearest sensitive receptor is the Whim Creek Hotel, located 28 km west of the quarry. The hotel is currently closed, however, there are plans to reopen the hotel in the future.

The quarry site is located within the Port Hedland Coast River Basin, which consists of six major rivers and numerous minor rivers and creeks. One of these minor creeks, the East Peawah River, is located on the western boundary and the south-west corner of the site, flowing north towards the ocean. The two sand dunes being mined are located immediately east of the river.

There is no excavation within two metres of the banks of the river or within two metres of the drip line of any significant riparian vegetation. No excavation is undertaken within three metres of the water table or below the clay river bed layer. Groundwater at the site is estimated to be approximately 12 metres below ground level, fluctuating with the seasons. There is no waste generated from the mining process at the site, screened materials either being sold, or used for rehabilitation.

The site has a maximum capacity of 100,000 tonnes per annual period, however, the throughput is expected to be 50,000 tonnes per year. The mining operation is a shallow open cut sand mine and it operates on a campaign basis throughout the dry season, due to the difficulty involved with mining damp sand.

Sand is excavated by loader and excavator and placed directly onto the screening plant which is located directly opposite the excavation area. Sand is screened into three different sizes; less than 8 mm and between 8 – 50 mm which is stockpiled for sale; and greater than 50 mm is stockpiled on site for future rehabilitation works. Sand is transported from site in road trains along the haul road to the highway for delivery to the customer.

The infrastructure is located in the south east corner of the site (Figure 1) and includes:

- processing area;
- office and crib room;
- ablution block (self-contained);
- workshop;
- laydown area;
- stockyard; and
- access and haul road.

Power onsite is supplied by a 10 kilovolt-ampere (kVa) self banded diesel generator. It is estimated that the site will use approximately 600 L of diesel per day and 6 L of top up oil and grease to power the loader, dump truck, screening plant, vehicles and generator. A workshop on site provides daily servicing, however, all major servicing is completed off site in South Hedland. A mobile fuel truck brings fuel to site and no fuel is stored on site.

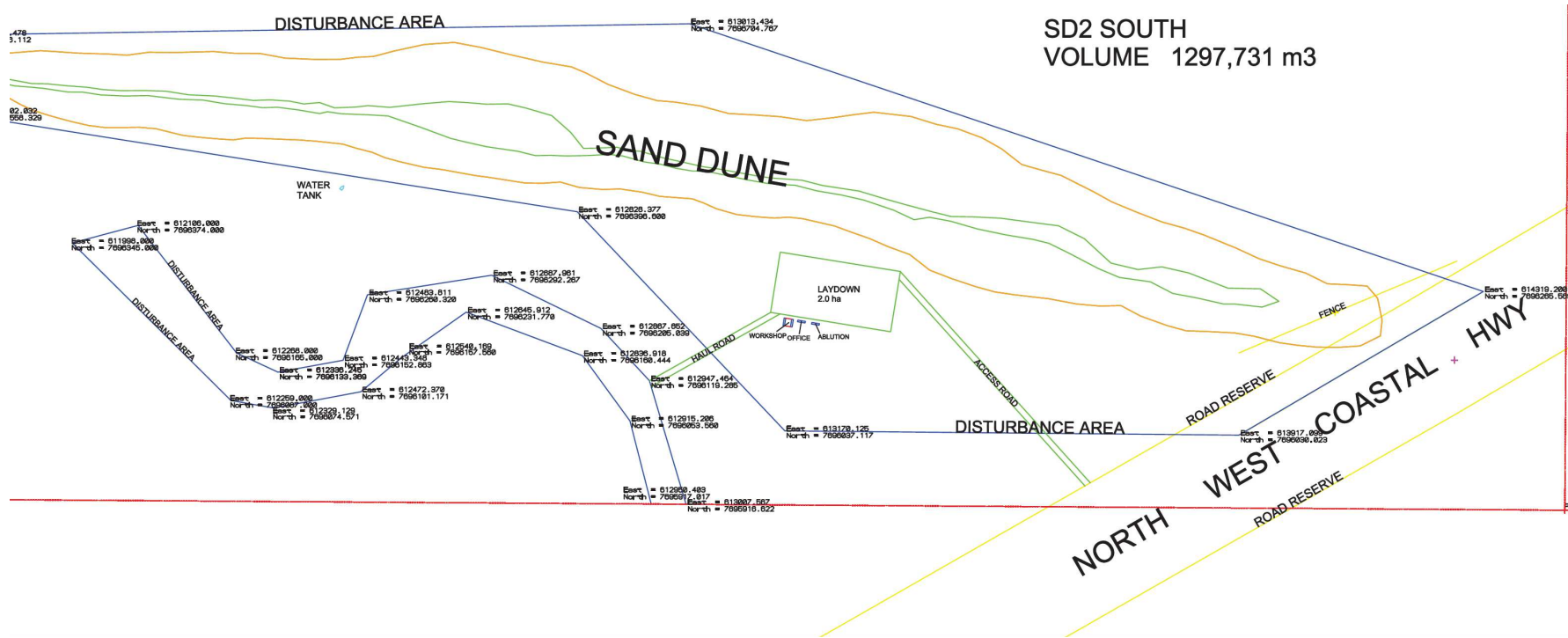


Figure 1: Site layout



4 Decision table

All applications are assessed under the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987*, DER's Corporate Policy Statement No.7 – Operational Risk Management and the risk matrix attached to this Decision Document in Section 6. Where other references have been used in making the decision they are detailed in the decision table.

DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.3 – 1.2.5	OSC	Operation DER's assessment and decision making are detailed in Appendix A.	General provision of the <i>Environmental Protection Act 1986</i> Application supporting documentation
Emissions general	L2.1.1	OSC	Descriptive limits have been set through condition 2.6 of the licence and therefore OSC regarding recording and investigation of exceedances of limits or targets has been included.	N/A
Point source emissions to air including monitoring	L2.2 and L3.2	N/A	Operation No significant point source air emissions are expected from the operation of the screening plant. A 10 kVa self bundled diesel generator provides power to the plant and ancillary infrastructure. No specified conditions relating to point source emissions to air or the monitoring of these emissions are required to be added to the licence.	General provision of the <i>Environmental Protection Act 1986</i> Application supporting documentation <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>
Point source emissions to	W2 L2.3	N/A	Operation There is no point source emissions to surface water during	General provision of the <i>Environmental</i>



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
surface water including monitoring			operation of the screening plant. The nearest surface water body is East Peawah River which runs along the western boundary and the south-west corner of the site and flows towards the ocean. The river is ephemeral and only flows following rainfall events, when the plant will not be operational. No specified conditions relating to point source emissions to surface water or the monitoring of such emissions are required to be added to the licence.	<i>Protection Act 1986</i> Application supporting documentation <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>
Point source emissions to groundwater including monitoring	L2.4	N/A	Operation There is no point source emissions to groundwater during operation of the screening plant. No mining will be undertaken within three metres of the water table or below the clay river bed layer and the groundwater at the site is approximately 12 m below ground level. No specified conditions relating to point source emissions to groundwater or the monitoring of such emissions are required to be added to the licence.	General provision of the <i>Environmental Protection Act 1986</i> Application supporting documentation <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>
Emissions to land including monitoring	L2.5	N/A	Operation There is no point source emissions to land during operation of the screening plant. There is no waste material generated by the quarry, with oversized material stockpiled for use in rehabilitation work. General waste generated at the site will be collected in 240 L mobile containment bins and disposed of at the South Hedland waste disposal facility by a licenced contractor. No specified conditions relating to point source emissions to land or the	General provision of the <i>Environmental Protection Act 1986</i> Application supporting documentation <i>Environmental</i>



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			monitoring of such emissions are required to be added to the licence.	<i>Protection (Unauthorised Discharges) Regulations 2004</i>
Fugitive emissions	L2.6.1 – 2.6.2	OSC	Dust Operation DER's assessment and decision making are detailed in Appendix B.	General provision of the <i>Environmental Protection Act 1986</i>
		N/A	Lighting Operation There are no significant light emissions from the operation of the quarry. North West Quarries operate the quarry on day shift only, however, if night shift work is required, lighting towers will be utilised to ensure visibility and safety of personnel. Night safety lighting will be minimal and directed towards footpaths and away from native vegetation. No specified conditions relating to lighting or the monitoring of such emissions are required to be added to the licence.	Application supporting documentation
Odour	L2.7	N/A	Operation The operation of the screening plant does not generate any odours. The ablution block is a self-contained facility which is maintained in good working order. All waste is removed from site by a licenced contractor to an approved facility. No specified conditions relating to odour or the monitoring of such emissions are required to be added to the licence.	General provision of the <i>Environmental Protection Act 1986</i> Application supporting documentation
Noise	L2.8	N/A	Operation Noise is generated on site by the following activities: <ul style="list-style-type: none"> • Loader and excavator operations; • Screening plant operations; • Loading road trains; 	General provision of the <i>Environmental Protection Act 1986</i> Application supporting



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			<ul style="list-style-type: none"> • Vehicle movements on site; and • Generator. <p>North West Quarries ensures that all equipment complies with relevant standards and is maintained in good working to minimised noise emissions. All public complaints related to noise events will be documented, investigated and addressed. The site will comply with the requirements of the <i>Environmental Protection (Noise) Regulations 1997</i>.</p> <p>Noise emissions from the site are unlikely to impact on the amenity of surrounding land users as the nearest sensitive receptor is approximately 28 km west of the site.</p> <p>No specified conditions relating to noise or the monitoring of such emissions are required to be added to the licence.</p>	<p>documentation</p> <p><i>Environmental Protection (Noise) Regulations 1997</i></p>
Monitoring general	L3	N/A	There are no monitoring requirements for the licence, therefore, no general monitoring conditions are required to be added to the licence.	N/A
Monitoring of inputs and outputs	L3	N/A	Operation Monitoring of inputs or outputs is not required to ensure efficient operation of the screening plant, therefore, no specific conditions relating to monitoring of inputs are required to be added to the licence.	<p>General provision of the <i>Environmental Protection Act 1986</i></p> <p>Application supporting documentation</p>
Process monitoring	L3	N/A	Operation Process monitoring is not required to ensure efficient operation of the screening plant, therefore, no specific conditions relating to process monitoring are required to be added to the licence.	<p>General provision of the <i>Environmental Protection Act 1986</i></p> <p>Application supporting</p>



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
				documentation
Ambient quality monitoring	L3	N/A	Operation No specific conditions relating to ambient monitoring are required to be added to the licence.	General provision of the <i>Environmental Protection Act 1986</i> Application supporting documentation
Meteorological monitoring	L3	N/A	Operation No specific conditions relating to meteorological monitoring are required to be added to the licence.	General provision of the <i>Environmental Protection Act 1986</i> Application supporting documentation
Improvements	L4	N/A	This licence relates to the operation of a new site, therefore, no specific conditions relating to improvements are required to be added to the licence.	N/A
Information	L5.2	N/A	Standard condition relating to the submission of the Annual Environmental Report and the Annual Audit Compliance Report have been included in the licence.	N/A



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
16/06/2014	Application advertised in West Australian (or other relevant newspaper)	No comments were received.	N/A
11/06/2014	Application referred to: Town of Port Hedland	Town of Port Hedland provided no comments on the application.	N/A
11/06/2014	Proponent sent a copy of draft instrument	The proponent had no comment on the draft documents.	N/A



6 Risk assessment

Note: This matrix is taken from DER's Corporate Policy Statement No.7 – 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

Hydrocarbon management

Emission description

Emission: Potential hydrocarbon spills from refuelling and equipment operations at the site.

Impact: Contamination of surrounding land and surface water drainage systems.

Controls: Only small amounts of hydrocarbons are stored on site in the workshop facility. Daily servicing is undertaken at the onsite workshop, however, all major servicing is completed off site in South Hedland. A mobile fuel truck is used to bring fuel to site as required. All storage and Handling of hydrocarbon and chemicals is undertaken in compliance with the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007* Code of Practice for the Storage and Handling of Dangerous Goods.

Containment drip trays are used for all equipment determined to represent a pollution risk and spill kits are located in each work area where hydrocarbons and chemicals are being handled. All water from the washdown facility is captured and removed from site by a licenced contractor to an approved facility.

Risk Assessment

Consequence: Minor

Likelihood: Possible

Risk rating: Moderate

Regulatory controls

OSC 1.2.3 and 1.2.4 have been included in the licence to ensure the appropriate management of environmentally hazardous materials at the site.

Residual Risk

Consequence: Minor

Likelihood: Unlikely

Risk rating: Moderate

Stormwater management

Emission description

Emission: Stormwater potentially contaminated with hydrocarbons or other chemicals used at the site.

Impact: Contamination of surrounding land and surface water drainage systems.

Controls: The site is operated during the dry months reducing the potential of stormwater coming into contact with contaminates. Bunding has been constructed to contain all potentially contaminated water and prevent surface water flows coming into contact with potentially contaminated areas. All potentially contaminated water is removed from site by a licensed contractor for disposal at an approved facility.

Risk Assessment

Consequence: Insignificant

Likelihood: Unlikely

Risk rating: Low

Regulatory controls

OSC 1.2.5 has been included in the licence to ensure the appropriate management of potentially contaminated stormwater.

Residual Risk

Consequence: Insignificant

Likelihood: Rare

Risk rating: Low



Appendix B

Dust

Emission description

Emission: The following activities undertaken at the site have the potential to generate dust emissions:

- Excavation operations;
- Screening operations;
- Loading and haulage of sand products;
- Movement of vehicles on unsealed roads;
- Stockpiles; and
- Disturbed areas.

Impact: Smothering of vegetation and nuisance dust. The nearest sensitive receptor is the Whim Creek Hotel, located approximately 28 km west of the site.

Controls: North West Quarries has implemented the following measures during operations to ensure that dust emissions from the site are minimised:

- Use of water carts and water sprays on disturbed areas;
- Water sprays used during screening process;
- Water sprays and drift fencing are used on short term stockpiles;
- Vegetation and bitumen emulsion will be used on long term stockpiles (greater than 3 months);
- Unsealed roads are covered with road base rock and kept moist;
- Disturbed and exposed areas will be progressively rehabilitated as soon as possible;
- Traffic and vehicle speeds are restricted at the site with signage;
- Rumble grids will be install at site exit points to minimise dust on public roads, if required;
- All trucks entering or leaving the site are covered with a light spray of water;
- Activities will be postponed during adverse weather conditions; and
- Visual inspections are undertaken daily to monitor dust emission.

Risk assessment

Consequence: Insignificant

Likelihood: Possible

Risk rating: Low

OSC condition 2.6.1 – 2.6.2 have been included in the Licence to ensure that dust emissions at the site are appropriately managed.

Residual risk

Consequence: Insignificant

Likelihood: Unlikely

Risk rating: Low