



Mr David Lynch
Contracts Manager
Spinifex Crushing and Screening Services Pty Ltd
16 Anthony Street
ALBANY WA 6330

Dear Mr Lynch

ENVIRONMENTAL PROTECTION ACT 1986: LICENCE GRANTED

Premises

Wandena Quarry
Lot 500 on DP 56200 The Midlands Road WALEBING WA 6510
Licence Number: L8821/2014/1

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 Steve Checker on (08) 9964 0901.

Yours sincerely

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

10 July 2014



Licence

Environmental Protection Act 1986, Part V

Licensee: Spinifex Crushing & Screening Services Pty Ltd

Licence: L8821/2014/1

Registered office: 16 Anthony Street
ALBANY WA 6330

ACN: 135 324 551

Premises address: Wandena Quarry
The Midlands Road
WALEBING WA 6510
Being Lot 500 on Deposited Plan 56200 as depicted in Schedule 1

Issue date: Thursday, 10 July 2014

Commencement date: Monday, 14 July 2014

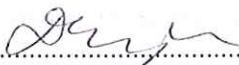
Expiry date: Saturday, 13 July 2019

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	500 000 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

Spinifex Crushing and Screening Services Pty Ltd ('Spinifex') processes quarry material from a magmatic and grano-diorite resource located near Walebing in the Shire of Moora using a mobile crushing and screening plant. The proposed quarrying will use standard drill and blast, load and haul techniques.

The project area is a greenfields site with no previous mining history. Mining will occur on a campaign basis depending upon commercial demand, with an expected annual start up production of up to 250,000 tonnes per year and a maximum capacity of 500,000 tonnes per year.

The project is located approximately 4 kilometres west of Walebing along the Midlands Road and situated on cleared agricultural land with no significant environmental receptors nearby. There is a separation of 3.2 km to the nearest residence.

This Licence is for the operation of a new facility established under works approval W5580/2014/1.

The licences and works approvals issued for the Premises since 13/3/2014 are:

Instrument log		
Instrument	Issued	Description
W5580/2014/1	13/3/2014	Initial works approval
L8821/2014/1	10/7/2014	Initial 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 (Midwest)
Department of Environment Regulation
PO Box 72
GERALDTON WA 6531
Telephone: (08) 9964 0901
Facsimile: (08) 9921 5713
Email: GeraldtonLR@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 L8821/2014/1 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;

'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.¹

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 within 28 calendar days after the end of the annual period. The report shall contain the information listed in Table 5.2.1 in the format or form specified in that table.

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
-	Summary of throughput during the annual period	None specified
5.1.3	Compliance	Annual Audit Compliance Report (AACR)
5.1.4	Complaints summary	None specified
2.6.1	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. Part B: As soon as practicable	N1
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution		

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

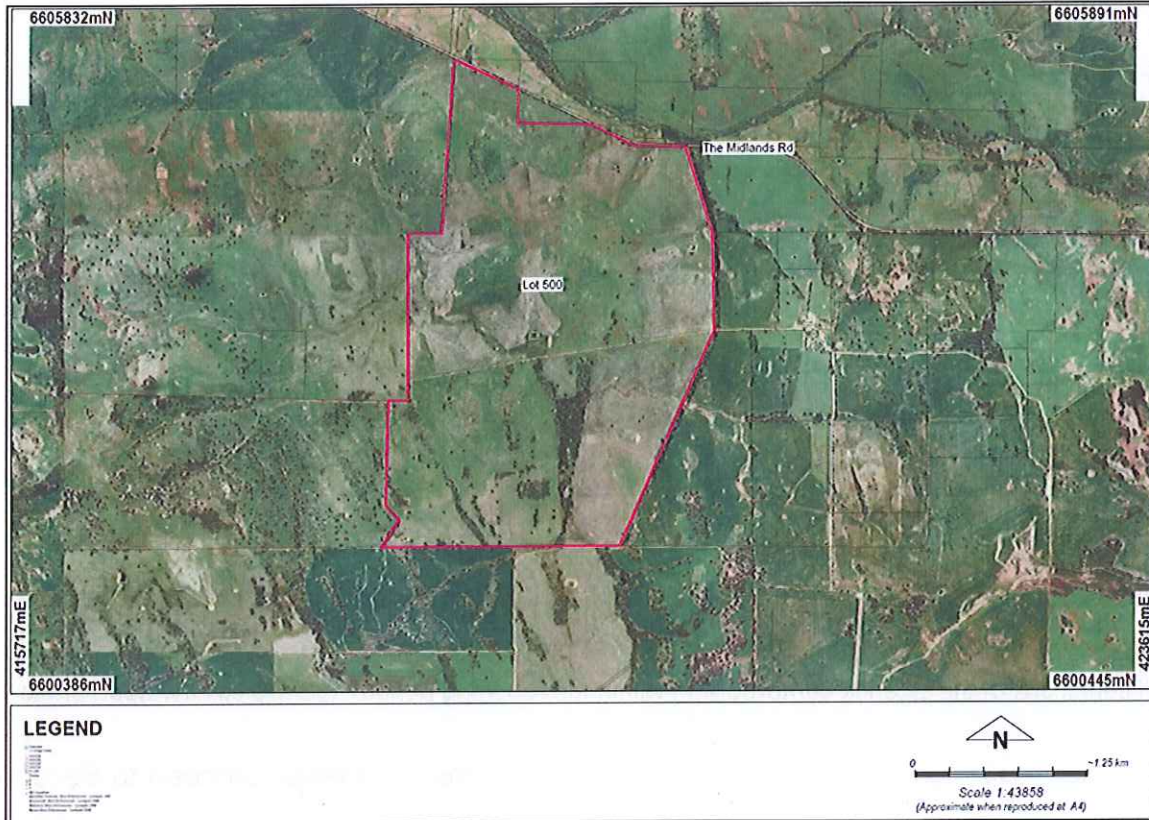
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

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





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) 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: _____

SIGNATURE: _____

NAME:
(printed) _____

NAME:
(printed) _____

POSITION: _____

POSITION: _____

DATE: ____/____/____

DATE: ____/____/____

SEAL (if signing under seal)



Licence: L8821/2014/1
Form: N1

Licensee: Spinifex Crushing & Screening Services 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 Spinifex Crushing & Screening Services Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Spinifex Crushing & Screening
Services Pty Ltd

Licence: L8821/2014/1

Registered office: 16 Anthony Street
ALBANY WA 6330

ACN: 135 324 551

Premises address: Wandena Quarry
The Midlands Road
WALEBING WA 6510
Being Lot 500 on Deposited Plan 56200

Issue date: Thursday, 3 July 2014

Commencement date: Monday, 7 July 2014

Expiry date: Saturday, 6 July 2019

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.

Decision Document prepared and authorised by: Steve Checker
Manager Licensing (Midwest)



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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 Administrativesummary

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	500,000 tonnes per annual period
Application verified	Date: 30/04/2014	
Application fee paid	Date: 7/05/2014	
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		
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, egg Site is subject to SO ₂ requirements of Kwinana EPP.		



3 Executive summary of proposal

Spinifex Crushing and Screening Services Pty Ltd ('Spinifex') seeks approval to process quarry material from a magmatic and grano-diorite resource located near Walebing in the Shire of Moora using a mobile crushing and screening plant situated within the project area. The proposed quarrying will use standard drill and blast, load and haul techniques. The primary intent of this operation is to quarry roadbase material for the upgrading of the Great Northern Highway between New Norcia and Wubin.

The project area is a greenfields site with no previous mining history. Mining will occur on a campaign basis depending upon commercial demand, with an expected annual start up production of up to 250,000 tonnes per year and a maximum capacity of 500,000 tonnes per year.

The project is located approximately 4 kilometres west of Walebing along the Midlands Road and situated on Lot 500 on DP 56200, which is owned by the Angepena Pastoral Company Pty Ltd (Tony and Judy Snell). Lot 500 is zoned for General Agriculture according to the Shire of Moora Town Planning Scheme.

The Wandena project will consist of the quarry; a ROM, crushing/screening and stockpiling area and an office and amenities area. Operational areas are expected to shift according to operational requirements. Figure 1 indicates the area (shown in pink) within which the mobile plant and associated infrastructure will be located over the life of mine.

Soils in the project area are generally shallow and stony and there are extensive areas without soil cover. Soil cover increases downslope as would be expected of an ancient erosional landscape.

There are no significant water permanent bodies within the project area. An ephemeral creek/river system lies approximately 1km to the west of the project area. Investigations have shown that there is no permanent sub-surface water that this proposal would likely impact on. The underlying rock is igneous and the fracture systems common to that rock type, which sometimes contain water, were found to be dry. The proponent has put down 19 holes to 6m into rock over about 15 hectares in the project area without finding even a perched water table on top of the rock.

The resource will be quarried using standard drill and blast techniques, with the resulting quarry product treated in a mobile crushing and screening plant, to produce product according to commercial demand. It is anticipated that minimal product will be stockpiled on site as the intent is to only produce material as and when commercial demand requires.

The nature of the topography and the material indicates that a bench system would be best employed. The typical bench in this material is approximately 6m in height with sloping walls for stability, with excavation mirroring the current 'bowl' shape of the southern facing hillside and moving back into the resource.

A waste rock dump will not be required on site as all products will be utilised. The materials to be quarried are essentially chemically inert and do not contain any sulphides, or other soluble materials, that are likely to cause harm or damage to the environment. As no sulphides will be present in the walls of the quarry and no waste rock will remain on-site, there is no potential for Acid Rock Drainage (ARD) or neutral metalliferous impacts to occur.

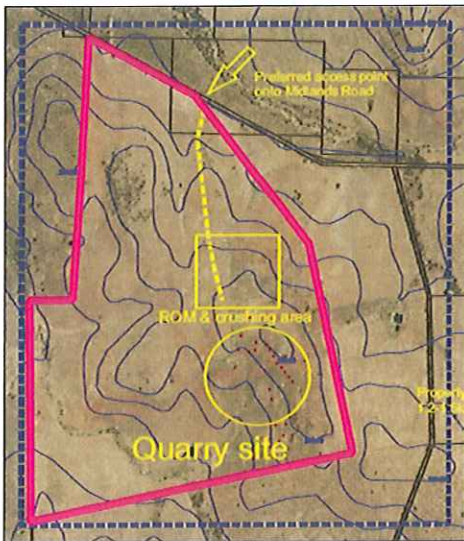
The crushing/screening plant, being mobile, will be changeable according to commercial demand. Spinifex intends to design and mobilise each circuit according to customer demand but would normally involve a primary trommel screen or similar, jaw and cone crushers, in addition to screens of various sizes and capacities.



It is anticipated that material will be moved from the quarry to the screening plant using a combination of wheel loaders and off road trucks. Material will be moved offsite by either single semi-trailer or double road trains depending upon final destination.

Drains around crusher and stockpile areas will be maintained to prevent uncontrolled runoff during periods of heavy rainfall. Erosion prevention measures will be taken on any disturbed watershed surfaces. These will include contour ripping of slopes, diversion bunds, spoon drains and rock armouring

Figure 1: Proposed operational area





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	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.3; L1.2.5;	OSC	<p>Operation and Emergency Emission Description <i>Emission:</i> Hydrocarbon discharge via spills, leaks and stormwater contamination <i>Impact:</i> Contamination of soil and groundwater. <i>Controls:</i> Limited fuel storage onsite - plant will be fuelled by an 8,000 litre service truck which will be refuelled daily in Moora. All mobile plant and light vehicle have spill kits. Only minor amounts of hydrocarbons will be stored onsite. Maximum volumes will be similar to a normal farming operation and consist of 1 or 2 drums (220L) of engine oil, a 220L drum of grease, and approximately 10-15 drums (20L) of various specialist oils .</p> <p>There will be no vehicle washdown onsite and vehicle servicing will incorporate the use of drip trays, spill kits and secondary containment (bundling) for oil change . The licence application covers stormwater erosion control but has minimal information on preventing/managing contaminated stormwater.</p> <p>Risk Assessment <i>Consequence:</i> Minor <i>Likelihood:</i> Possible</p>	<p>Application supporting documentation</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations, 2004.</i></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
			<p><i>Risk Rating: Moderate</i></p> <p>Regulatory Controls OSC L1.2.3 has been added to the licence to set hydrocarbon and other dangerous goods storage requirements; OSC L1.2.5 has been added to the licence to minimise and manage stormwater contamination.</p> <p><u>Residual Risk</u> Consequence: Insignificant Likelihood: Unlikely Risk Rating: Low</p>	
Emissions general	L 2.1.1	OSC	<p>Descriptive limits will be set through condition L2.6.2 of the licence. OSC L2.1.1 regarding recording and investigation of exceedances of limits or targets has therefore been included.</p>	N/A
Point source emissions to air including monitoring	L2.2; L3.2	N/A	<p>No significant point source air emissions are expected from the operation of the mobile plant. No specified conditions relating to air emissions are proposed for this project.</p>	<p><i>Environmental Protection (Unauthorised Discharges) Regulations, 2004.</i></p> <p>Application supporting documentation</p>
Point source emissions to surface water including monitoring	L2.3; L3.3	N/A	<p>Emissions to surface water are not expected. There are no lakes, rivers or other significant water bodies within the project area. No specified conditions relating to emissions to surface water are proposed for this project.</p>	<p>Application supporting documentation</p>
Point source emissions to	L2.4; L3.4	N/A	<p>No emissions to groundwater are expected from the construction or operation of the mobile plant.</p>	<p>Application supporting documentation</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
groundwater including monitoring	L2.5; L3.5	N/A	No significant emissions to land are expected from the construction or operation of the mobile plant. All processed material is intended to be used. There will be no waste rock dump required or tailings produced. Minor amounts of incidental wastes generated by staff onsite will be transported to the Moora landfill as required. No specified conditions relating to emissions to land are proposed for this project.	Application supporting documentation
Emissions to land including monitoring	L 2.6.1 – L2.6.2	OSC	<p>Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Dust will be generated from blasting, heavy earthmoving vehicles, light vehicle movements, the crushing/screening plant and from product stockpiles. <i>Impact:</i> Dust emissions can be harmful to human health and the environment. Elevated total suspended particulates (TSP) can impact ambient environmental quality resulting in amenity impacts (nuisance) and can smother vegetation. <i>Controls:</i> Significant separation to nearest residence (3.2km), water trucks on the haul roads, sprinklers on stockpiles, minimal stockpiling onsite (commercial demand basis), shields and covers on conveyors, sprinklers on transfer conveyors, sheeting of roadways with crushed rock, 50 km/hr maximum speed limit for all vehicles and minimisation of unnecessary movement of vehicles.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible</p>	Application supporting documentation
Fugitive emissions				



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
Odour	L2.7	N/A	<p><i>Risk Rating: Moderate</i></p> <p>Regulatory Controls OSC 2.6.1 and 2.6.2 will be applied to the licence to require dust management measures and prevent excessive dust emissions.</p> <p><i>Residual Risk</i> <i>Consequence: Minor</i> <i>Likelihood: Unlikely</i> <i>Risk Rating: Moderate</i></p> <p>There are no significant odour emissions expected from this project.</p>	N/A
	L2.8	N/A	<p>Operation <u>Emission Description</u> <i>Emission: Noise from operation of the crushing plant and heavy vehicle movements.</i></p> <p><i>Impacts: Nuisance impacts on nearest residences.</i></p> <p><i>Controls: Project is subject to the Environmental Protection (Noise) Regulations 1987, significant separation to the nearest residences - 3.2km to the west northwest and 3.9km to the northwest, the quarry will be orientated away from residences towards the south west, and hours of machinery operation will be 6.45am - 5:00pm.</i></p> <p><u>Risk Assessment</u> <i>Consequence: Insignificant</i> <i>Likelihood: Unlikely</i> <i>Risk Rating: Low</i></p> <p><u>Regulatory Controls</u> No specified noise conditions are proposed. The <i>Environmental Protection (Noise) Regulations 1987</i> will provide adequate</p>	<p>Application supporting documentation</p> <p><i>Environmental Protection (Noise) Regulations 1987.</i></p>
Noise				



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
			regulatory control in the unlikely event of any noise issues.	
			<u>Residual Risk</u> Consequence: Insignificant Likelihood: Unlikely Risk Rating: Low	
Monitoring general	L3.1	N/A	No specified general monitoring conditions are proposed for this project.	N/A
Monitoring of inputs and outputs	N/A	N/A	No specified input/output monitoring conditions are proposed for this project.	N/A
Process monitoring	L3.7	N/A	No specified process monitoring conditions are proposed for this project.	N/A
Ambient quality monitoring	L3.8	N/A	No specified ambient quality monitoring conditions are proposed for this project.	N/A
Meteorological monitoring	L3.9	N/A	No specified meteorological monitoring conditions are proposed for this project.	N/A
Improvements	L4	N/A	No specified improvement conditions are proposed for this project.	N/A
Information	L5	N/A	No specified information conditions are proposed for this project.	N/A



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
19/05/2014	Application advertised in West Australian (or other relevant newspaper)	None	N/A
21/06/2014	Proponent sent a copy of draft instrument	None	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