



Government of **Western Australia**
Department of **Environment Regulation**

Your ref L6145/1983/11
Our ref DER2014/001258
Enquiries C. Conway-Physick
Phone (08) 9964 0901
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Email caroline.conway-physick@der.wa.gov.au

Mr Dean Schwartz
General Manager - Operations
GMA Garnet Pty Ltd
122 Goulds Road
NARNGULU WA 6532

Dear Mr Schwartz

ENVIRONMENTAL PROTECTION ACT 1986: LICENCE GRANTED

Premises: GMA Garnet Pty Ltd
Lot 141 on Diagram 79746, Goulds Road, Narngulu
Licence Number: L6145/1983/11

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 Caroline Conway-Physick on (08) 9964 0901.

Yours sincerely

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

07 August 2014



Licence

Environmental Protection Act 1986, Part V

Licensee: GMA Garnet Pty Ltd

Licence: L6145/1983/11

Registered office: Suite 2, Floor 18, Exchange Plaza
2 The Esplanade
PERTH WA 6000

ACN: 009 344 227

Premises address: GMA Garnet Narngulu
122 Goulds Road
NARNGULU WA 6532
Being Lot 141 on Diagram 79746 as depicted in Schedule 1.

Issue date: Thursday, 07 August 2014

Commencement date: Wednesday, 01 October 2014

Expiry date: Monday, 30 September 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
8	Mineral sands mining or processing: premises on which mineral sands ore is mined, screened, separated or otherwise processed.	5 000 tonnes or more per year	3 000 000 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

GMA Garnet Pty Ltd (previously Garnet Millers Australia Pty Ltd) constructed a dry processing, packaging and storage facility on the present site at 122 Goulds Road in 1983. The plant was set up to treat garnet sand concentrates supplied from the company's mine and wet processing facilities located near Port Gregory. The garnet sand product is supplied world-wide as an industrial abrasive for blast-cleaning and water-jet cutting. Garnet has largely replaced hazardous abrasives such as silica sand and smelter slags.

Since 1983, the facilities have progressively been expanded to treat in excess of 300,000 tonnes per annum of garnet concentrates. Most of the product is in the form of dried and graded natural garnet, supplied in bulk, bulk bags, paper sacks on pallets or paper sacks inside bulk bags. Ilmenite sand is produced as a by-product. Recovery of small quantities of zircon-rutile concentrate from dry plant tailings commenced late 2007.

The extraction of garnet and ilmenite products from the raw garnet concentrates and zircon-rutile concentrate from the tailings requires only relatively simple processing and materials handling equipment. There are no chemicals or hazardous substances involved in the process (other than diesel fuel for a front-end loader). Dust emission levels are low due to garnet being a naturally hard, tough mineral and the fact that the feed concentrates are washed during processing at the mine site. Dust collectors are installed to collect any process dust emissions. Strategically placed water cannons are used to suppress dust in unsealed sections of the yard during windy summer periods.

Waste from the sand plant consists mostly of quartz and shell (calcium carbonate) sand which is removed as a non-magnetic fraction during processing and dust (predominantly calcium carbonate) from the plant's dust collectors, of relatively minor quantity. The combined waste is regularly trucked back to the mine site in bulk. At the mine site the waste is added to wet plant tailings for progressive back-filling of the mine pit.

The premises no longer operates the slime pits which have been closed in and revegetated. All wet processing occurs at the GMA Garnet, Port Gregory Mine Site.

The main emission from the premises is dust. Dust issues from windblown mineral sands stockpiles is regulated within the Licence under sections 1.2 and 2.6.

Currently washdown wastewater, from the washdown bay, flows into a grease trap with a pipe located 300mm from the top of the sump which runs to a soak well that drains to ground. In addition, stormwater contained within the diesel storage bunded area is drained to the immediate surrounds from the containment area. Approximately 20 cubic metres (m³) of hydrocarbon contaminated soil is remediated on site on an ongoing basis as required, from machinery and other spills. The management of hydrocarbons at the premises from washdown bays, bunded



areas and contaminated waste has been identified as an area for improvement and has been defined in sections 1.2, 1.3, 2.5, 3.5 and 4.1.

This Licence is the successor to licence L6145/1983/10 and includes a conversion of the existing licence to a new format REFIRE licence.

The licences and works approvals issued for the Premises, since 06/09/2000, are:

Instrument log		
Instrument	Issued	Description
L6145/1983/5	06/09/2000	Licence reissue
L6145/1983/6	28/09/2001	Licence reissue
L6145/1983/7	28/08/2002	Licence reissue
L6145/1983/8	01/09/2003	Licence reissue
L6145/1983/9	24/08/2004	Licence reissue
L6145/1983/9	27/06/2008	Licence amendment to amend licence date period
L6145/1983/10	03/09/2009	Licence reissue
L6145/1983/11	31/07/2014	Licence reissue and REFIRE format conversion

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 August until 30 July in the following year;

'CEO' means CEO 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: midwest@der.wa.gov.au;

'code of practice for the storage and handling of dangerous goods' means the 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;

'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;

'hardstand' means a surface with a permeability of 10^{-9} metres/second or less;

'Licence' means this Licence numbered L6145/1983/11 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 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

- 1.3.1 The Licensee shall ensure that waste material and contaminated water are only discharged into containment sumps or ponds provided within the infrastructure detailed in Table 1.3.1.

Table 1.3.1: Containment infrastructure		
Containment cell or dam number(s)	Material	Infrastructure requirements
Holding tanks, diesel storage bunded area and workshop areas	Contaminated stormwater and liquid waste	Impervious, sealed collection sumps
Washdown bays	Washdown water	Impervious, sealed collection sump (after 30/11/2014 in accordance with IR2 of condition 4.1.2)

- 1.3.2 The Licensee shall collect waste lubricants and hydraulic fluids in holding tanks for recycling and disposal off-site by a licensed contractor.
- 1.3.3 The Licensee shall ensure that any hydrocarbon contaminated soils are:
- (a) disposed of for remediation at a licenced landfill; or
 - (b) remediated on site on an impermeable surface/ hardstand that will ensure no surface runoff can occur from that site.



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 Point source emissions to air

There are no specified conditions relating to point source emissions to air in this section.

2.3 Point source emissions to surface water

There are no specified conditions relating to point source emissions to surface water in this section.

2.4 Point source emissions to groundwater

There are no specified conditions relating to point source emissions to groundwater in this section.

2.5 Emissions to land

- 2.5.1 The Licensee shall ensure that where waste is emitted to land from the emission points in Table 2.5.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this licence.

Table 2.5.1: Emissions to land

Emission point reference	Description	Source including abatement
L1	Discharge from washdown bays	Washdown wastewater flows into a grease trap with a pipe located 300mm from the top of the sump which runs to a soak well that drains to ground.
L2	Discharge from diesel storage bunded area	Rainwater that has collected within diesel storage bunded area. To be sampled prior to discharge.

- 2.5.2 The Licensee shall not cause or allow emissions to land greater than the limits listed in Table 2.5.2.

Table 2.5.2: Emission limits to land

Emission point reference	Parameter	Limit (including units)	Averaging period
L1 and L2	Total recoverable hydrocarbons (TRH-silica) ¹	90 mg/L	Spot sample

Note¹: Referenced to Contaminated Sites Management Series 'Assessment levels for soil, sediment and water guidelines v4.1, 2010'.

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 on 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.

3.1 General monitoring

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

3.2 Monitoring of point source emissions to air

There are no specified conditions relating to monitoring of point source emissions to air in this section.

3.3 Monitoring of point source emissions to surface water

There are no specified conditions relating to monitoring of point source emissions to surface water in this section.

3.4 Monitoring of point source emissions to groundwater

There are no specified conditions relating to monitoring of point source emissions to groundwater in this section.

3.5 Monitoring of emissions to land

- 3.5.1 The Licensee shall undertake the monitoring in Table 3.5.1 according to the specifications in that table.

Table 3.5.1: Monitoring of emissions to land			
Emission point reference	Parameter	Units	Frequency
L1 (Washdown bay); L2 (Diesel storage bunded area)	Total recoverable hydrocarbons (TRH)	mg/L	Quarterly
			Prior to discharge of wastewaters to land

3.6 Monitoring of inputs and outputs

There are no specified conditions relating to monitoring of inputs and outputs in this section.

3.7 Process monitoring

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

3.8 Ambient environmental quality monitoring

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

3.9 Meteorological monitoring

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



4 Improvements

- 4.1.1 The Licensee shall complete the improvements in Table 4.1.1 by the date of completion in Table 4.1.1.
- 4.1.2 The Licensee, for improvements not specifically requiring a written submission, shall write to the CEO stating whether and how the Licensee is compliant with the improvement within one week of the completion date specified in Table 4.1.1.

Table 4.1.1: Improvement program		
Improvement reference	Improvement	Date of completion
IR1	The Licensee shall develop and implement a maintenance plan for the whashdown bay sump which includes, but is not limited to, the following: <ul style="list-style-type: none">• removal of sand/ dirt trapped within the sump;• removal of wastewater from the sump;• disposal of all solid and liquid waste to a licenced facility; and• general maintenance of the infrastructure.	31/10/2014
IR2	The licensee shall ensure that the washdown bay (shown as L1 in Schedule 1) is equipped with a sealed sump that does not allow any discharge of wastewaters to the environment.	30/11/2014



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.
- 5.1.5 The Licensee shall keep a record of any incidents that include the loss of greater than 20 litres of chemicals including fuel, oil or other hydrocarbons and provide a summary of each of the incidents in the Annual Environmental Report.



5.2 Reporting

- 5.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 56 calendar days after the end of the annual period (i.e: 30 September). 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
-	Summary of premises annual throughput of waste material and ore product produced	None specified
-	Summary of all contaminated waste material removed from premises (liquid or solid) including, but not limited to: <ul style="list-style-type: none"> Type of waste and waste volume; Submission of contaminated waste tracking forms. 	None specified
Table 3.5.1	Monitoring of emissions to land	None specified
5.1.3	Compliance	Annual Audit Compliance Report (AACR)
5.1.4	Complaints summary	None specified
5.1.5	Incidents summary	None specified

Note 1: Forms are in Schedule 2

- 5.2.2 The Licensee shall submit the information in Table 5.2.2 to the CEO at the Contact Address 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 ¹
-	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

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
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1

Note¹: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

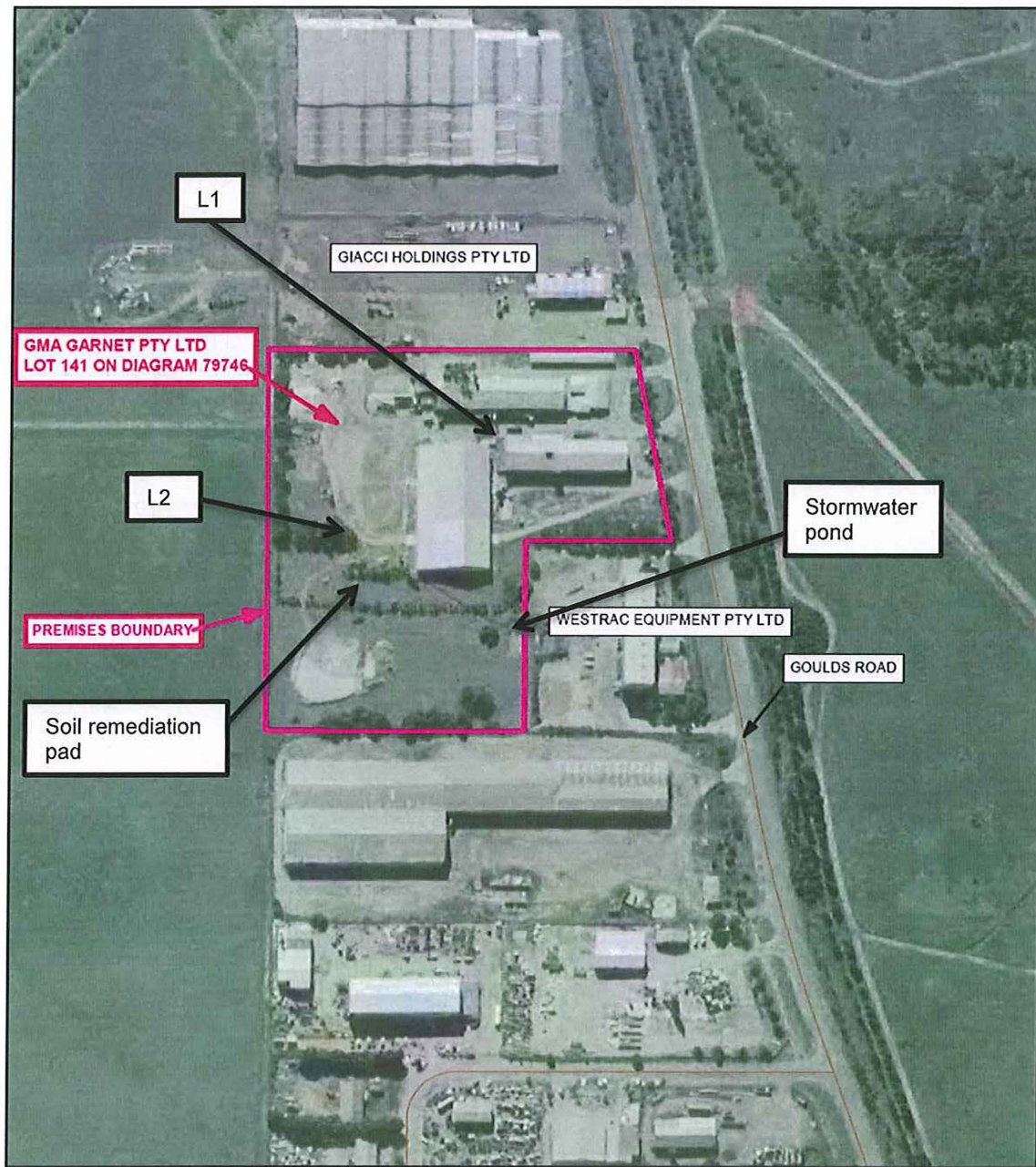
Note²: Forms are in Schedule 2



Schedule 1: Maps

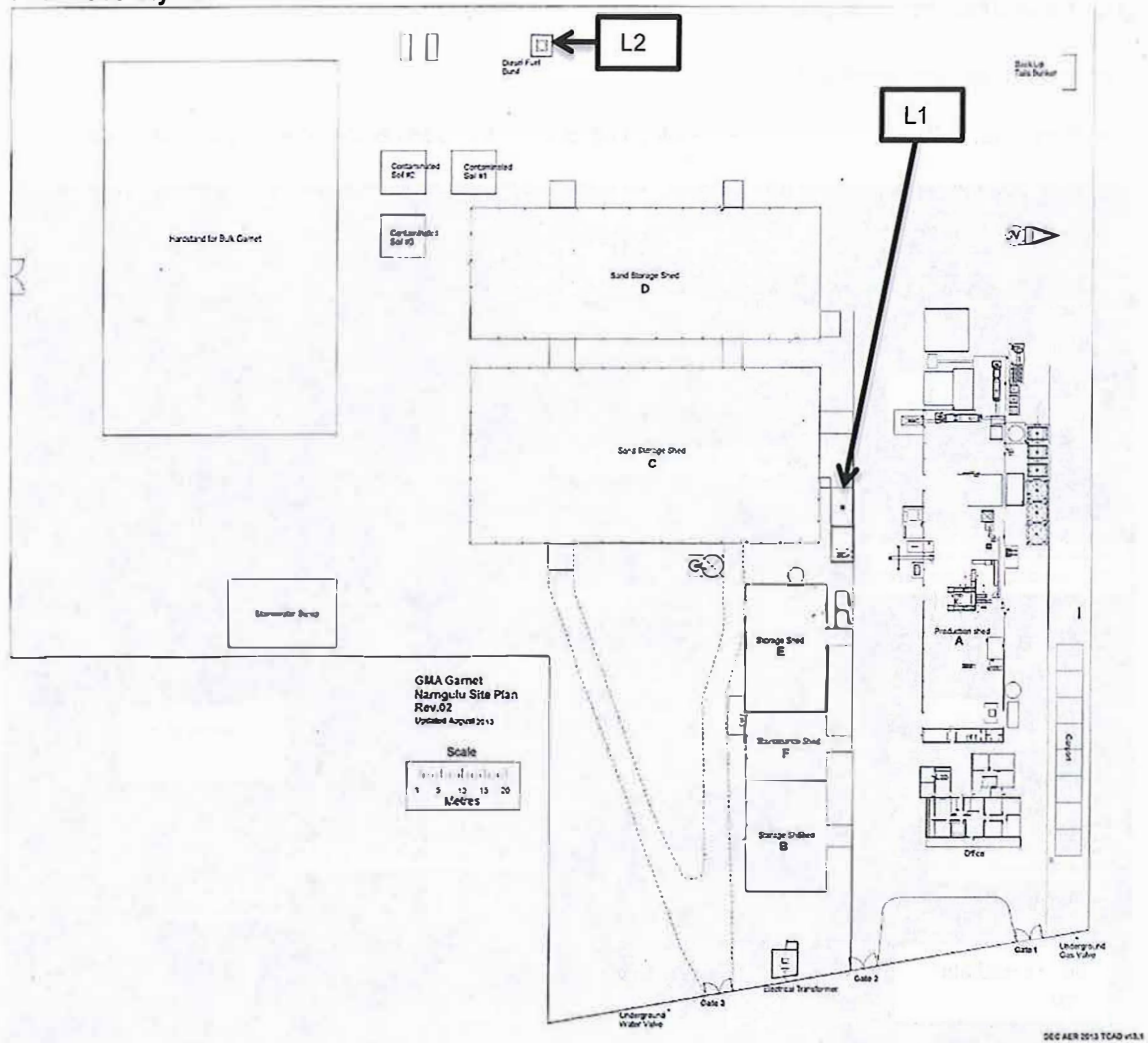
Premises map and emission points

The Premises is shown in the maps below. The purple line depicts the Premises boundary.





Premises layout





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: _____

NAME:
(printed) _____

POSITION: _____

DATE: ____/____/____

SEAL (if signing under seal)

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: ____/____/____



Licence: L6145/1983/11
Form: N1

Licensee: GMA Garnet 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 GMA Garnet Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: GMA Garnet Pty Ltd

Licence: L6145/1983/11

Registered office: Suite 2, Floor 18, Exchange Plaza
2 The Esplanade
PERTH WA 6000

ACN: 009 344 227

Premises address: GMA Garnet Narngulu
122 Goulds Road
NARNGULU WA 6532
Being Lot 141 on Diagram 79746 as depicted in Schedule 1.

Issue date: Thursday, 7 August 2014

Commencement date: Wednesday, 01 October 2014

Expiry date: Monday, 30 September 2019

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.

Decision Document prepared by:

Caroline Conway-Physick
Licensing Officer

Decision Document 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 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, 5.1.2 and 5.3.1.

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 as a result of this application 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
	8	3 000 000 tonnes per annum
Application verified	Date: 25/06/2014	
Application fee paid	Date: 03/07/2014	
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 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 and assessment

GMA Garnet Pty Ltd (previously Garnet Millers Australia Pty Ltd) constructed a dry processing, packaging and storage facility on the present site at 122 Goulds Road in 1983. The plant was set up to treat garnet sand concentrates supplied from the company's mine and wet processing facilities located near Port Gregory. The garnet sand product is supplied world-wide as an industrial abrasive for blast-cleaning and water-jet cutting. Garnet has largely replaced hazardous abrasives such as silica sand and smelter slags.

Since 1983, the facilities have progressively been expanded to treat in excess of 300,000 tonnes per annum of garnet concentrates. Most of the product is in the form of dried and graded natural garnet, supplied in bulk, bulk bags, paper sacks on pallets or paper sacks inside bulk bags. Ilmenite sand is produced as a by-product. Recovery of small quantities of zircon-rutile concentrate from dry plant tailings commenced late 2007.

The extraction of garnet and ilmenite products from the raw garnet concentrates and zircon-rutile concentrate requires only relatively simple processing and materials handling equipment. There are no chemicals or hazardous substances involved in the process (other than diesel fuel for a front-end loader). Dust emission levels are low due to garnet being a naturally hard, tough mineral and the fact that the feed concentrates are washed during processing at the mine site. Dust collectors are installed to collect any process dust emissions. Strategically placed water cannons are used to suppress dust in unsealed sections of the yard during windy summer periods.

Waste from the sand plant consists mostly of quartz and shell (calcium carbonate) sand which is removed as a non-magnetic fraction during processing and dust (predominantly calcium carbonate) from the plant's dust collectors, of relatively minor quantity. The combined waste is regularly trucked back to the mine site in bulk. At the mine site the waste is added to wet plant tailings for progressive back-filling of the mine pit.

The premises no longer operates the slime pits which have been closed in and revegetated. All wet processing occurs at the GMA Garnet, Port Gregory Mine Site.

The main emission from the premises is dust. Dust issues from windblown mineral sands stockpiles are regulated within the Licence under sections 1.2 and 2.6.

Currently washdown wastewater, from the washdown bay, flows into a grease trap with a pipe located 300mm from the top of the sump which runs to a soak well that drains to ground. In addition, stormwater contained within the diesel storage bunded area is drained to the immediate surrounds from the containment area. Approximately 20 cubic metres (m³) of hydrocarbon contaminated soil is remediated on site on an ongoing basis as required, from machinery and other spills.

The management of hydrocarbons at the premises from washdown bays, bunded areas and contaminated waste has been identified as an area for improvement and has been defined in sections 1.2, 1.3, 2.5, 3.5 and 4.1 of the Licence.

An Environmental Improvement Programme has been included to improve the hydrocarbon management at the premises.



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, L1.3.1, L1.3.2, L1.3.3	OSC NSC	<p><u>Emission Description</u></p> <p><i>Emission:</i> Stormwater contaminated from washdown bays, hydrocarbon storage area and remediation pad and associated activities discharges to ground on a haphazard, consistent basis.</p> <p><i>Impact:</i> Contamination of surrounding land and surface water drainage systems from the addition of hydrocarbon residues, sediments, oil and grease and heavy metals.</p> <p><i>Controls:</i> Currently wastewater from the washdown bay flows into a grease trap with a pipe located 300mm from the top of the sump which runs to a soak well that drains to ground. Regular clearing/ maintenance of this sump is not in place. In addition, stormwater contained within the diesel storage bund area is drained to the immediate surrounds from the containment area. At the remediation pad (direct to ground), approximately 20 cubic metres (m³) of hydrocarbon contaminated soil is remediated on site on an ongoing basis as required, from machinery and other spills.</p> <p>Recent testing (received 22/07/2014) has shown low levels of hydrocarbon contamination within the water discharged from the diesel storage bund area.</p> <p><u>Risk Assessment</u></p> <p><i>Consequence:</i> Moderate</p> <p><i>Likelihood:</i> Possible</p> <p><i>Risk Rating:</i> Moderate</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</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><u>Regulatory Controls</u></p> <p>OSC 1.2.5 has been included to minimise the risk of stormwater being contaminated from activities on the site. OSC 1.2.3 (previous licence condition W3) , and NSC 1.3.2 (previous licence condition W7) have been included to identify the hydrocarbon storage areas within the premises and their management. OSC 1.3.1 has been included to outline containment requirements for potentially contaminated liquid wastes. NSC 1.3.3 has been included to ensure operation and management of the on-site remediation of contaminated soil is carried out adequately and is not discharged to ground.</p> <p>Previous licence condition W4 has not been included in the licence as the slimes pits have been filled in and revegetated. The premises no longer carries out wet processing.</p> <p>The site has had numerous uncontrolled discharges from the washdown bay, diesel storage bunded area and remediation pad. As the regulatory controls have not prevented discharges an improvement condition has been included in the licence requiring a stormwater management plan be developed. See section 4, Improvements, of this Table.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Moderate <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p>	
Emissions general	L2.1.1	OSC	This condition replaces condition G1(a) of the previous licence and requires that any exceedance of any descriptive or numerical target or limit in the licence is investigated.	
Point source emissions to	N/A	N/A	There are no point source emissions to air from the premises that require regulation through this section.	General provisions of the



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
air including monitoring				<i>Environmental Protection Act 1986.</i> <i>Environmental Protection (Unauthorised Discharges) Regulations 2004.</i>
Point source emissions to surface water including monitoring	N/A	N/A	There are no point source emissions to surface water from the premises.	
Point source emissions to groundwater including monitoring	N/A	N/A	There are no point source emissions to groundwater from the premises.	
Emissions to land including monitoring	L2.5.1 and L2.5.2 L3.5.1	OSC NSC	<p>Currently washdown wastewater, from the washdown bay, flows into a grease trap with a pipe located 300mm from the top of the sump which runs to a soak well that drains to ground. In addition, stormwater contained within the diesel storage bunded area is drained to the immediate surrounds from the containment area. Hydrocarbon contaminated soil from machinery and other spills is remediated on site as required, on unlined, in-situ soils.</p> <p>Monitoring carried out on rainwater captured within the diesel storage bunded area showed low levels of Total Recoverable Hydrocarbon contamination (received 22/07/2014). Cumulative effects or extent of contamination to the surrounding soils at the premises have not been identified or assessed, at the remediation pad or diesel storage bunded area discharge point.</p>	<p>General provisions of the <i>Environmental Protection Act 1986.</i></p> <p>Contaminated Sites Management Series 'Assessment levels for soil,</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
			Improved management of hydrocarbon discharges at the premises is required.	<i>sediment and water guidelines v4.1, 2010</i> .
Fugitive emissions	L2.6.1 - L2.6.2	OSC	Fugitive emissions have not been reassessed as part of this amendment. OSC 2.6.1 and 2.6.2 have been included to replace condition A1 and A2 of the previous licence.	General provisions of the <i>Environmental Protection Act 1986</i> .
Odour	N/A	N/A	Odour has not been reassessed as part of this amendment. As the previous licence did not impose controls on odour, no specified conditions have been included in this section. SC 1.2.1 applies.	General provisions of the <i>Environmental Protection Act 1986</i> .
Noise	N/A	N/A	Noise has not been reassessed as part of this amendment. As the previous licence did not impose controls on noise, no specified conditions have been included in this section. The <i>Environmental Protection (Noise) Regulations 1997</i> and SC 1.2.1 apply.	<i>Environmental Protection (Noise) Regulations 1997</i> General provisions of the <i>Environmental Protection Act 1986</i>
Monitoring general	N/A	N/A	There is no requirement for general monitoring conditions.	
Monitoring of inputs and outputs	N/A	N/A	Monitoring requirements have not been reassessed as part of this amendment. As the previous licence did not require monitoring of inputs and outputs no specified conditions have been included in this section.	
Process monitoring	N/A	N/A	Monitoring requirements have not been reassessed as part of this amendment. As the previous licence did not require process monitoring no specified	



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
			conditions have been included in this section.	
Ambient quality monitoring	N/A	N/A	Monitoring requirements have not been reassessed as part of this amendment. As the previous licence did not require ambient quality monitoring no specified conditions have been included in this section.	
Meteorological monitoring	N/A	N/A	Monitoring requirements have not been reassessed as part of this amendment. As the previous licence did not require meteorological monitoring no specified conditions have been included in this section.	
Improvements	L4.1.1, 4.1.2	OSC	An improvement programme in OSC 4.1.1 and 4.1.2 has been defined in relation to hydrocarbon management at the premises from washdown bays, diesel storage bunded areas and remediation of contaminated soils. The previous licence did not address hydrocarbon storage or management.	General provisions of the <i>Environmental Protection Act 1986</i> .
Information	L5.1.1-5.1.4 L5.1.5 L5.2.1 L5.3.1	OSC NSC	SC 5.1.5-5.1.3 and 5.2.1 replace conditions G2 and G3 of the previous licence. SC 5.1.4 is an addition to the licence which has not previously included reporting on complaints for the premises. NSC 5.1.5 has been included from the current licence, condition W1(d). SC 5.3.1 replaces G1(a) of the previous licence.	
Licence Duration	N/A	N/A	The Licence is issued for a five year period. The premises is considered a low risk site with a minor history of non-compliance issues, and does not require stricter enforcement through the reduction of the reissue licencing period for assessment purposes.	



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
14/07/2014	Application advertised in West Australian (or other relevant newspaper)	Nil	N/A
23/07/2014	Proponent sent a copy of draft instrument	The draft document was submitted to the proponent (Wayne Dawson) on 23/07/2014 for comment. Comments were received back on 29 July 2014 with only one change requested relating to condition 5.2.1, submission timeframe.	Licence condition 5.2.1 has been changed from 28 to 56 calendar days after the end of the annual period.



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