



# Licence

## *Environmental Protection Act 1986, Part V*

**Licensee:** Empire Oil Company (WA) Limited

**Licence:** L8766/2013/1

**Registered office:** 229 Stirling Hwy  
 CLAREMONT WA 6010

**ACN:** 009 475 423

**Premises address:** Red Gully Processing Plant  
 Wannamal Road West  
 BOONANARRING WA 6503  
 Being Lot 5653 on Plan 206748

**Issue date:** Friday, 20 November 2015

**Commencement date:** Monday, 23 November 2015

**Expiry date:** Sunday, 22 November 2020

**Prescribed premises category**  
 Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
10	Oil or gas production from wells: premises on land or offshore, on which crude oil, natural gas or condensate is extracted from below the surface of the land or the seabed, as the case requires, and is treated or separated to produce stabilized crude oil, purified natural gas or liquefied hydrocarbon gases.	5000 tonnes or more per year	Not more than 90,700 tonnes per annual period

**Conditions**

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

Date Signed: 20 November 2015

.....  
 Lauren Trott  
 Officer delegated under section 20  
 of the *Environmental Protection Act 1986*



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## Introduction

This Introduction is not part of the Licence conditions.

### DER's industry licensing role

The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

### Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link: <http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.



Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

#### Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

#### Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

#### Premises description and Licence summary

This licence relates to the operation of the Red Gully Processing Plant constructed under works approval (W5238/2012/1). The processing plant processes gas and liquids piped from the Gingin West-1 and Red Gully-1 feed wells to produce purified gas and condensate. Purified gas is transported via a pipeline to a connection point on the Dampier Bunbury Natural Gas Pipeline (DBNGP) receival facility owned and operated by Dampier Bunbury Pipeline (DBP). Condensate is directed to the storage tanks on site and then loaded to the road tanker for transport to BP in Kwinana. Treated water is discharged to a lined evaporation pond within the premises.

The plant is located at Lot 5653 on Plan 206748 Wannamal Road, Boonanarring within the Shire of Gingin, which is approximately 80km north east of Perth and 17 km north of Gingin. The site access is along Wannamal Road west via Brand Highway, which is located immediately to the east of the plant.

Air emissions are anticipated from the export compressor gas engine driver, power generation, cold vent purge and cold venting due to facility blow down for maintenance. The main emissions from the operation are carbon dioxide and volatile organic compounds (VOC's). Carbon dioxide emissions will be recorded in accordance with the National Greenhouse and Energy Reporting (NGER) requirements. Natural gas will also be released during shut down for maintenance. There will be no generation of sulphur dioxide and particulates from this operation.

This Licence is for the operation of a new facility established under works approval (W5238/2012/1).

The licences and works approvals issued for the Premises since 27/09/2012 are:

Instrument log		
Instrument	Issued	Description
W5238/2012/1	27/09/2012	Works approval to construct the facility
L8766/2013/1	20/11/2015	Licence issued

#### Severance

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

### END OF INTRODUCTION



## Licence conditions

### 1 General

#### 1.1 Interpretation

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

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

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

**'annual period'** means the inclusive period from 1 January until 31 December in the following year;

**'AS 4323.1'** means the Australian Standard AS4323.1 *Stationary Source Emissions Method 1: Selection of sampling positions*;

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

**'CEO'** for the purpose of correspondence means;

Department Administering the Environmental Protection Act 1986  
Locked Bag 33  
CLOISTERS SQUARE WA 6850  
Email: info@der.wa.gov.au

**'freeboard'** means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point;

**'Licence'** means this Licence numbered L8766/2013/1 and issued under the Act;

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

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

**'Premises'** means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

**'Schedule 1'** means Schedule 1 of this Licence unless otherwise stated;

**'Schedule 2'** means Schedule 2 of this Licence unless otherwise stated;

**'stack test'** means a discrete set of samples taken over a representative period at normal operating conditions;

**'USEPA'** means United States (of America) Environmental Protection Agency;

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



- 1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.
- 1.1.5 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
- (a) pollution;
  - (b) unreasonable emission;
  - (c) discharge of waste in circumstances likely to cause pollution; or
  - (d) being contrary to any written law.

## 1.2 General conditions

- 1.2.1 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.
- 1.2.2 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.
- 1.2.3 The Licensee shall implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises.

## 1.3 Premises operation

- 1.3.1 The Licensee shall ensure that produced water is only discharged into the lined evaporation pond as per the specification in Table 1.3.1.

Table 1.3.1: Containment infrastructure		
Containment Cell	Material	Requirements
Evaporation pond	Treated produced water	Lined with High Density Polyethylene (HDPE) Geomembrane with 2mm thickness and a density of 0.94 g/cm <sup>3</sup> over the soil base layer to achieve a permeability of at least 10 <sup>-9</sup> m/s.

- 1.3.2 The Licensee shall ensure that the evaporation pond is maintained with a minimum top of embankment freeboard of 300 millimetres.



## 2 Emissions

### 2.1 General

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

### 2.2 Point source emissions to air

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

<b>Table 2.2.1: Emission points to air</b>			
<b>Emission point reference and location on Map of emission points</b>	<b>Emission Point and source</b>	<b>Emission point height (m)</b>	<b>Source, including any abatement</b>
B-2501	Vent stack	10.7	Vent system for gaseous waste

## 3 Monitoring

### 3.1 General monitoring

3.1.1 The licensee shall ensure that all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

3.1.2 The Licensee shall ensure that annual monitoring is undertaken at least nine months apart.

3.1.3 The Licensee shall record production or throughput data and any other process parameters relevant to any monitoring undertaken.

### 3.2 Monitoring of point source emissions to air

3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

<b>Table 3.2.1: Monitoring of point source emissions to air</b>					
<b>Emission point reference</b>	<b>Parameter</b>	<b>Units<sup>1,3</sup></b>	<b>Averaging period</b>	<b>Frequency<sup>2</sup></b>	<b>Method</b>
B-2501	Methane Ethane Propane Isobutane n-Butane Isopentane n-Pentane Methyl Pentane n-Hexane Hydrogen Sulphide	mg/m <sup>3</sup>	Minimum 30 min	Annual	USEPA Method 18
B-2501	Quantity of gas vented	m <sup>3</sup>	Annually	Continuous	None specified



Note 1: All units are referenced to STP dry

Note 2: Monitoring shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production.

3.2.2 The Licensee shall ensure that all non-continuous sampling and analysis undertaken pursuant to condition 3.2.1 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

## 4 Improvements

### 4.1 Improvement program

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**

<b>Improvement reference</b>	<b>Improvement</b>	<b>Date of completion</b>
IR1	<p>The Licensee shall install a sampling port on the vent stack (emission point reference B-2501) in accordance with AS4323.1-1995 to enable sampling of;</p> <ul style="list-style-type: none"> <li>• Gas Flow Rates (USEPA Method 2),</li> <li>• Carbon Dioxide and Oxygen (USEPA 3a),</li> <li>• Moisture (USEPA 4),</li> <li>• Volatile Organic Compounds, carbon dioxide and hydrogen sulphide (USEPA 18)</li> </ul> <p>The works associated with the installation of the sampling port is to be scheduled during the next upgrade.</p>	By 31 March 2017
IR2	<p>The Licensee shall conduct the sampling program under Section 6.2 of the 'Commissioning plan for works approval – Red Gully Pipeline and Processing Facility Project' (Commissioning Plan), dated 8 March 2013 and authored by Empire Oil Company (WA) Limited.</p> <p>The Licensee shall submit to the CEO a report of the sampling program test results in accordance with Section 6.2 of the Commissioning Plan.</p>	Within 2 months of date of completion for IR1



## 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.

**Table 5.2.1: Annual Environmental Report**

Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
-	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
3.2.1	Point source air emission monitoring results and volume	AR1
5.1.3	Compliance	Annual Audit Compliance Report (AACR)
5.1.4	Complaints summary	None specified

Note 1: Forms are in Schedule 2





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

### 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.

<b>Table 5.3.1: Notification requirements</b>			
<b>Condition or table (if relevant)</b>	<b>Parameter</b>	<b>Notification requirement<sup>1</sup></b>	<b>Format or form<sup>2</sup></b>
2.1.1	Breach of any limit specified in the Licence	As soon as practicable but no later than 5pm of the next usual working day.	N1

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

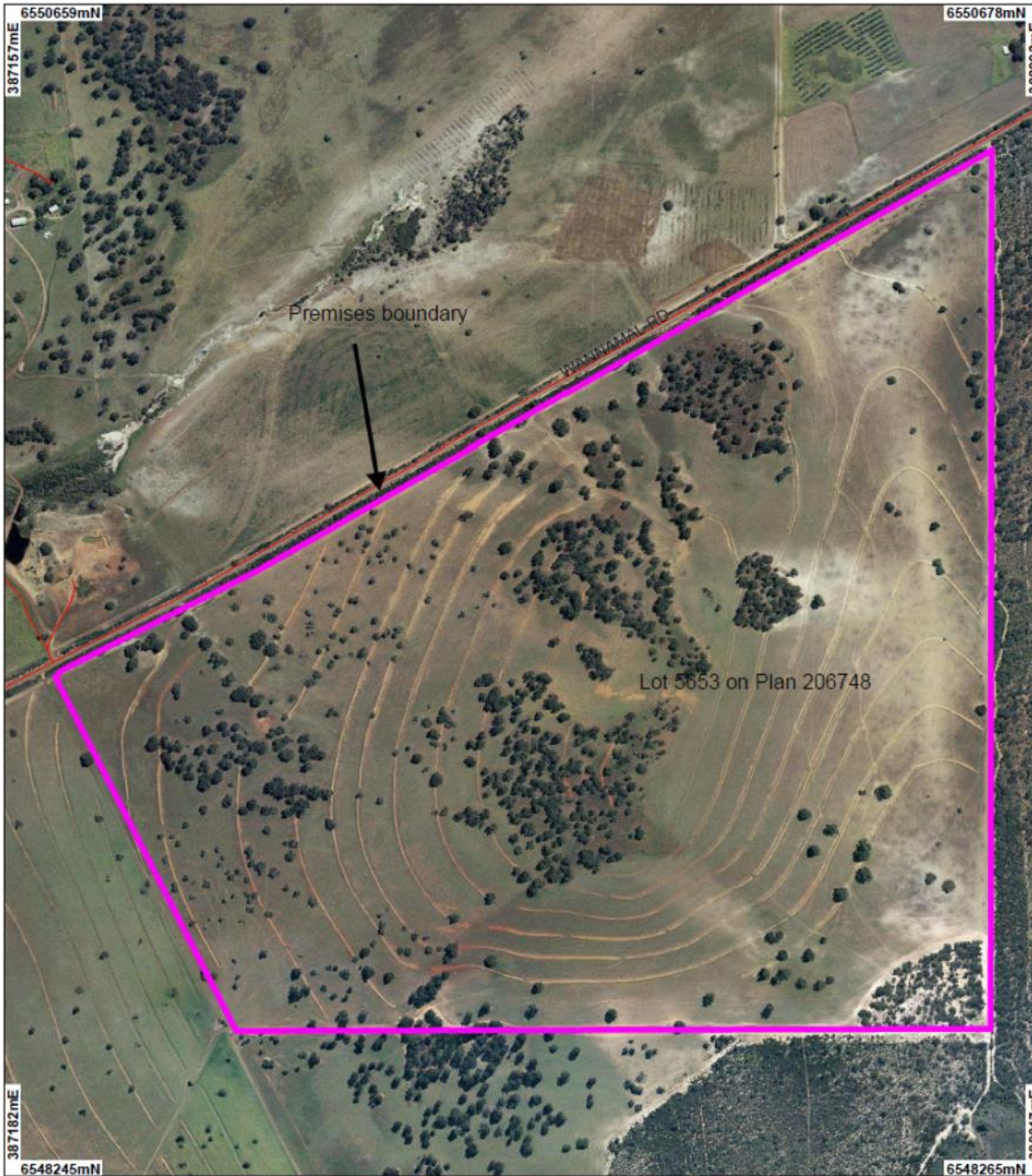
Note 2: Forms are in Schedule 2



## Schedule 1: Maps

### Premises map

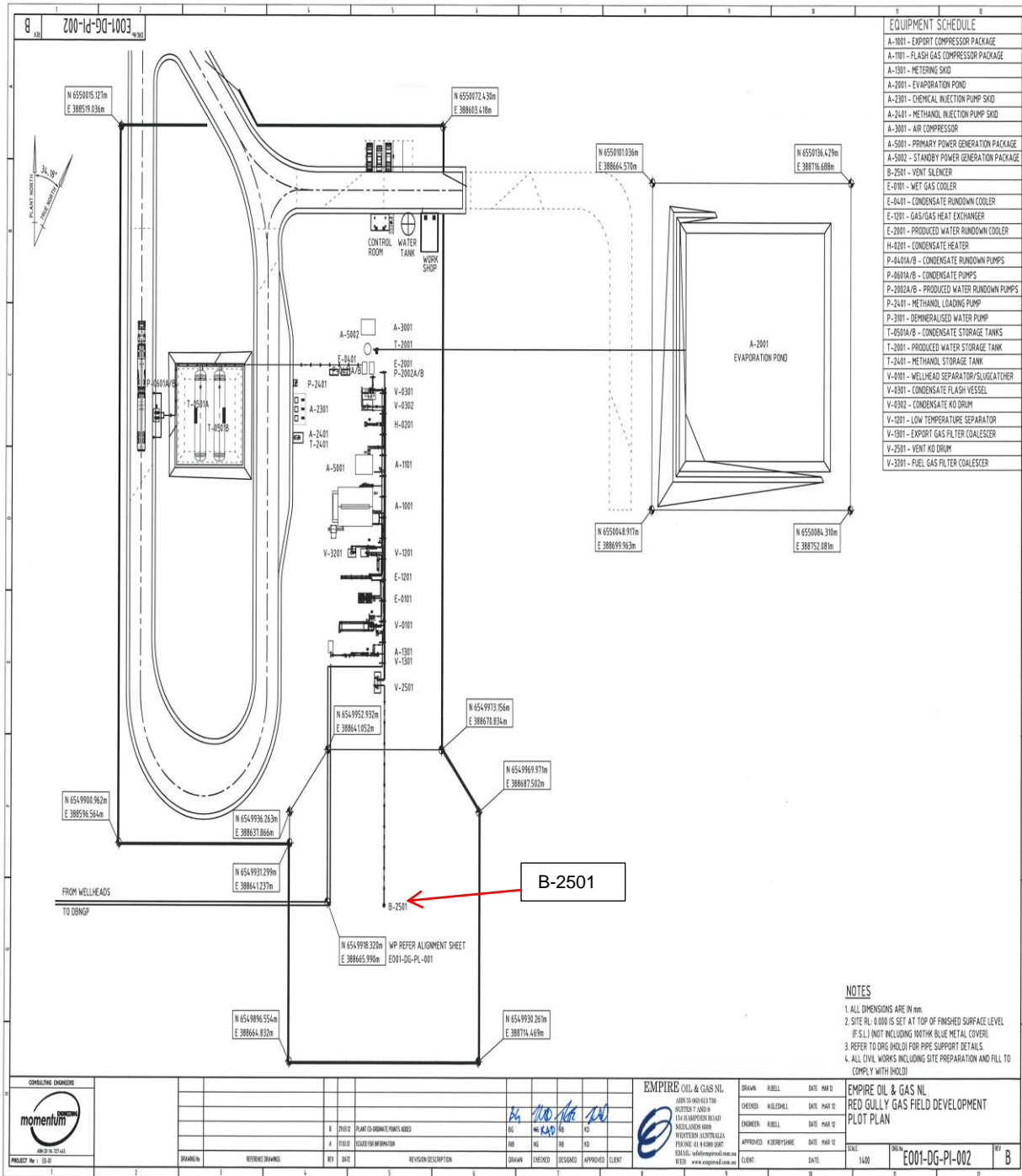
The Premises is shown in the map below. The pink line depicts the Premises boundary.





### Map of Emission Point

The location of emission point (B-2501) defined in Table 2.2.1 is shown below





## Schedule 2: Reporting & notification forms

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

### ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

#### SECTION A LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name: Trading as:	ABN:
Reporting period: _____ to _____	

#### STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of the Licence complied with within the reporting period? (please tick the appropriate box)

Yes  Please proceed to Section C

No  Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:





## SECTION 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: L8766/2013/1 Licensee: Empire Oil Company (WA) Limited  
 Form: AR1 Period :  
 Name: Monitoring of point source emissions to air

Emission point	Parameter	Result <sup>1</sup>	Averaging period	Method	Sample date & times
B-2501	Methane Ethane Propane Isobutane n-Butane Isopentane n-Pentane Methyl Pentane n-Hexane Hydrogen Sulphide Methane	mg/m <sup>3</sup>	Minimum 30 min	USEPA Method 18	
B-2501	Quantity of gas vented	m <sup>3</sup>	Annually	None specified	

Note 1: All units are referenced to STP dry and relevant Oxygen Correction in Table 2.2.2

Signed on behalf of Empire Oil Company (WA) Limited ..... Date: .....



Licence: L8766/2013/1  
 Form: N1

Licensee: Empire Oil Company (WA) Limited  
 Date of breach:

**Notification of detection of the breach of a limit.**

These pages outline the information that the operator must provide.  
 Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

<b>Notification requirements for the breach of a limit</b>	
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	

Name	
Post	
Signature on behalf of Empire Oil Company (WA) Limited	
Date	





# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Licensee: Empire Oil Company (WA) Limited**

**Licence: L8766/2013/1**

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**Registered office:** 229 Stirling Hwy  
CLAREMONT WA 6010

**ACN:** 009 475 423

**Premises address:** Red Gully Processing Plant  
Wannamal Road West  
BOONANARRING WA 6503  
Being Lot 5653 on Plan 206748.

**Issue date:** Friday, 20 November 2015

**Commencement date:** Monday, 23 November 2015

**Expiry date:** Sunday, 22 November 2020

### **Decision**

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

Decision Document prepared by: Irene Vasquez  
Licensing Officer

Decision Document authorised by: Lauren Trott  
Delegated Officer



## Contents

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## 1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

## 2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/>	New Licence <input checked="" type="checkbox"/>
	Licence amendment <input type="checkbox"/>	Works Approval amendment <input type="checkbox"/>
Activities that cause the premises to become prescribed premises	<b>Category number(s)</b>	<b>Assessed design capacity</b>
	10 - Oil or gas production from wells	Not more than 90,700 tonnes per annual period
Application verified	Date: 03/07/2013	
Application fee paid	Date: 09/07/2013	
Works Approval has been complied with	Yes <input type="checkbox"/>	No <input checked="" 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 checked="" type="checkbox"/>	No <input type="checkbox"/> Referral decision No: A494619 Managed under Part V <input checked="" 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"/>		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

### 3 Executive summary of proposal and assessment

This licence relates to the operation of the Red Gully Processing Plant constructed under works approval W5238/2012/1. The processing plant processes gas and liquids piped from the Gingin West-1 and Red Gully-1 feed wells to produce purified gas and condensate. Purified gas is transported via a pipeline to a connection point on the Dampier Bunbury Natural Gas Pipeline (DBNGP) receival facility owned and operated by Dampier Bunbury Pipeline (DBP). Condensate is directed to the storage tanks on site and then loaded to the road tanker for transport to BP in Kwinana. Treated produced water is discharged to a lined evaporation pond within the premises.

The plant is located at Lot 5653 on Plan 206748 Wannamal Road, Boonanarring within the Shire of Gingin, which is approximately 80km north east of Perth and 17 km north of Gingin. The site access is along Wannamal Road west via Brand Highway, which is located immediately to the east of the plant.

The main emissions from the premises are air emissions from the export compressor gas engine driver, power generation, cold vent purge and cold venting due to facility blow down for maintenance. The main emissions from the operation are carbon dioxide and volatile organic compounds (VOC's). Carbon dioxide will be recorded in accordance with the National Greenhouse and Energy Reporting (NGER) requirements. Natural gas will also be released during shut down for maintenance. There will be no generation of sulphur dioxide and particulates from this operation.

This Licence is for the operation of a new facility established under works approval (W5238/2012/1).



## 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.1 – 1.2.3	<p><b>Operation</b></p> <p><u>Emission Description</u>  <i>Emission:</i> Hydrocarbon contaminated stormwater generated as a result of rainfall events within the loading bay.  <i>Impact:</i> Localised contamination of surrounding land and surface water drainage systems. Potential adverse impacts to soils and vegetation in the local area from the addition of hydrocarbons in the contaminated stormwater. There is potential for minor breach of legal requirements if stormwater is contaminated with hydrocarbons. An Environmentally Sensitive Area (ESA) exists within a 500m of the Project Area and is recognised as a Swan Coastal Plain Wetland. Static groundwater level is at 152m from ground level within the Perth-Yarragadee aquifer. There are no other aquifers present.  <i>Controls:</i> Contaminated stormwater is treated in a triple interceptor and then directed to a lined evaporation pond that complies with WQPN – 26 and is designed to cater for a 1 in 100 year storm event. Potentially contaminated stormwater from the loading bay is directed to the interceptor via the drainage system prior to discharge into the evaporation pond. Uncontaminated stormwater is directed away from the plant to a local soak.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Moderate</p>	<p>General provisions of the <i>Environmental Protection Act (EP Act)</i></p> <p>Water Quality Protection Note 26 – Liners for containing pollutants, using synthetic membranes (Department of Water): August 2013</p> <p>Works approval supporting documentation provided as e-mail: 6 July and 13 August 2012</p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Regulatory Controls</u> Conditions 1.2.1 – 1.2.3 and 1.3.2 have been added to the licence to require the operator to prevent stormwater runoff becoming contaminated by activities on the premises.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p>	<p>authored by Empire Oil Company (WA) Limited to Department of Environment (DEC)</p> <p>Environmental Protection (Unauthorised Discharges) Regulations 2004</p>
Premises operation	L1.3.1 – 1.3.2	<p><b>Operation</b></p> <p><u>Emission Description</u> <i>Emission:</i> Produced water contaminated with hydrocarbons could be discharged to the environment as a result of overtopping of the evaporation pond. <i>Impact:</i> Localised contamination of surrounding land. Potential adverse impacts to soil and vegetation from the produced water. An Environmentally Sensitive Area (ESA) exists within 500m of the Project Area and is recognised as a Swan Coastal Plain Wetland. Static groundwater level is at 152m from ground level within the Perth-Yarragadee aquifer. There are no other aquifers present. <i>Controls:</i> The proponent proposes the following:</p> <ul style="list-style-type: none"> <li>• Water will be separated from condensate by a condensate flash vessel;</li> <li>• Produced water is pumped to a storage tank and sampled to determine if there is any condensate carry over; and</li> <li>• Produced water will be directed to the lined evaporation pond that is designed to cater for a 1 in 100 year storm event and complies with WQPN – 26.</li> </ul>	<p>General provisions of the <i>EP Act</i></p> <p>Commitment in works approval application: Empire Oil Company (WA) Limited, Environmental Works Approval Category 10 Application, Red Gully Pipeline and Production Facility Project,</p>



<b>DECISION TABLE</b>			
<b>Works Approval / Licence section</b>	<b>Condition number W = Works Approval L= Licence</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
		<p><u>Risk Assessment</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u>            Condition L1.3.1 – 1.3.2 have been added to the licence to require the proponent to;</p> <ul style="list-style-type: none"> <li>• discharge produced water to the lined evaporation pond only; and</li> <li>• a minimum freeboard of 300mm is maintained.</li> </ul> <p><u>Residual Risk</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Low</p>	<p>April 2012 authored by Empire Oil Company (WA) Limited.</p>
<b>Emissions general</b>	L2.1.1	<p>Descriptive limits have been set through conditions L1.3 &amp; 2.2 of the licence and therefore a condition regarding recording and investigation of exceedances of limits has been included.</p>	N/A
<b>Point source emissions to air including monitoring</b>	L2.2.1 L3.1.1 – 3.2.2	<p><b>Operation</b>            During routine operations significant emissions relating to particulates, nitrogen oxides (NOx), sulphur oxides (SOx), carbon monoxide (CO) and BTEX are not expected to be emitted. Flaring of natural gas is not conducted therefore; no additional emissions as a result of combustion will be emitted to air. Continuous vent stack purge at a small rate of gas is necessary for safety reasons, this equates to a negligible amount of 1kg/hr during operation.            Vent stack emissions were measured during commissioning for carbon dioxide, nitrogen, oxygen and VOC's that relate to the natural composition of gas. The commissioning report confirmed carbon dioxide and VOC's (mainly methane, ethane,</p>	<p>Commissioning Report for Works Approval W5238/2012/1, Red Gully Pipeline and Processing Plant dated 25 May 2015 authored by Empire Oil</p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>propane, and isobutane) were the significant emissions detected. The power generation unit and export compressor are small load units (0.6 Megawatt in total) that utilise natural gas as feedstock.</p> <p><u>Emission Description</u>  <i>Emission:</i> Carbon dioxide and volatile organic compounds (VOCs) will result from the export compressor gas engine driver, power generation, cold vent purge and cold venting due to facility blowdown for maintenance.  <i>Impact:</i> Short term, reduced local air quality. The plant is located in a remote location with four residents located between 1km and 3.5km's from the facility. There are no other industrial activities within the vicinity therefore; it is unlikely that the facility will have a cumulative impact on the overall air quality.  <i>Controls:</i> The commissioning of the Flash Gas Compressor has subsequently reduced air emissions from the vent stack. The emissions during the short controlled venting events and continuous vent stack purging will be monitored and managed through facility management systems.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u>            Condition L3.2 – Monitoring of point source emissions to air has been included in the licence from the vent stack only. Monitoring relates only to VOC's and not carbon dioxide as this is deemed to be a greenhouse emission and is reported through NGER. No monitoring will be included as part of this licence for exhaust emissions from the power unit and export compressor due to the negligible size of the units.</p>	<p>Company (WA) Limited.</p> <p>National Greenhouse And Energy Reporting (NGER): <i>National Greenhouse and Energy Reporting Act 2007 (NGER Act)</i></p>



<b>DECISION TABLE</b>			
<b>Works Approval / Licence section</b>	<b>Condition number W = Works Approval L= Licence</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
		<u>Residual Risk</u> <i>Consequence: Minor</i> <i>Likelihood: Unlikely</i> <i>Residual Risk Rating: Moderate</i>	
<b>Point source emissions to surface water including monitoring</b>	N/A	Point source emissions to surface water including monitoring will not occur during operation.	
<b>Point source emissions to groundwater including monitoring</b>	N/A	Point source emissions to groundwater including monitoring will not occur during operation.	
<b>Emissions to land including monitoring</b>	N/A	Emissions to land including monitoring will not occur during operation.	
<b>Fugitive emissions</b>	N/A	Fugitive emissions will not occur during operation.	
<b>Noise</b>	N/A	Noise during operation was assessed as part of the works approval however, prior to the completion of commissioning a noise assessment report was requested under condition 8(b) of W5238/2012/1. An increase in background noise levels was identified at monitoring location 5 (residence) which could be attributed to insects, frogs or wind noise rather than noise emissions from the processing facility. Despite this, the Red Gully Pipeline and Processing Facility complies with the assigned levels as per the <i>Environmental Protection (Noise) Regulations 1997</i> (Noise Regulations) for all nearby noise sensitive residents.	Commissioning Report for Works Approval W5238/2012/1, Red Gully Pipeline and Processing Plant dated 25 May





DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><b>Operation</b></p> <p><u>Emission Description</u>  <i>Emission:</i> Noise emissions from the 24hr/7 day per week operation of the plant particularly from the export compressor and Flash Gas Compressor.  <i>Impact:</i> Nuisance noise impacts on four sensitive locations (residents) the closest being 1.29km and the furthest 3.5km's from the facility. Given the remoteness of the location, it is expected that there will be no cumulative impacts of multiple noise sources (other than industry) within the vicinity.  <i>Controls:</i> The export compressor and Flash Gas Compressor have been mitigated through the installation of purpose built acoustic enclosures. Should complaints be received during operations, noise will be mitigated through noise monitoring and subsequent investigations with the addition of acoustic enclosures if necessary.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Rare  <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u>            There are no requirements for conditions relating to noise. The premise is regulated directly through the Noise Regulations.</p> <p><u>Residual Risk</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Rare  <i>Risk Rating:</i> Low</p>	<p>2015 authored by Empire Oil Company (WA) Limited.</p> <p><i>Environmental Protection (Noise) Regulations 2004</i></p>
<b>Odour</b>	N/A	Odour emissions will not occur during operation.	



<b>DECISION TABLE</b>			
<b>Works Approval / Licence section</b>	<b>Condition number W = Works Approval L= Licence</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
<b>Monitoring general</b>	L3.2.1	General monitoring conditions have been included on the licence to support the monitoring relating to point source emissions to air.	
<b>Monitoring of inputs and outputs</b>	N/A	There are no monitoring of input and outputs required for this Premises.	
<b>Process monitoring</b>	N/A	There are no process monitoring conditions required for this Premises.	
<b>Ambient quality monitoring</b>	N/A	There are no ambient quality monitoring conditions required for this Premises.	
<b>Meteorological monitoring</b>	N/A	There are no meteorological quality monitoring conditions required for this Premises.	
<b>Improvements</b>	L4.1.1 – 4.1.2	<p>The vent stack was not fitted with a sampling port in accordance with the works approval W5238/2012/1. As a result of this, improvement condition IR1 under section 4 – Improvements has been included to fulfil these works.</p> <p>Improvement condition IR2 has also been included requiring the proponent to conduct gas flow, carbon dioxide and oxygen, and moisture sampling upon completion of IR1 and in accordance with the Commissioning Plan.</p>	Commitment in works approval application (works approval): Empire Oil Company (WA) Limited, Environmental Works Approval Category 10 Application, Red Gully Pipeline and Production Facility Project, April 2012 authored by



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			Empire Oil Company (WA) Limited.  Section 6.2 – Sampling of the 'Commissioning plan for works approval – Red Gully Pipeline and Processing Facility Project' (Commissioning Plan), dated 8 March 2013 and authored by Empire Oil Company (WA) Limited and approved by the Department of Environment and Conservation on 13 March 2013.
<b>Information</b>	L5.1.1 – 5.3.1	Licence condition 5.2.1 requires the licensee to submit results from stack tests conducted annually.	
<b>Licence Duration</b>	N/A	The licence will be issued for 5 years, as the regulatory controls imposed by the licence ensure risks to the environment are adequately managed.	



## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
15/07/2013	Application advertised in West Australian (or other relevant newspaper)	No comments received.	
29/10/15	Proponent sent a copy of draft instrument	Minor comments received via electronic mail dated 16 November 2015.	Majority of comments incorporated into final version of the licence.



## 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