



| | |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Licence number | L6358/1995/11 |
| Licence holder | AWE Perth Pty Ltd |
| ACN | 009 204 031 |
| Registered business address | Level 11, Exchange Tower 2 The Esplanade Perth, Western Australia 6000 |
| DWER file number | 2010/003132-1 |
| Duration | 21/12/2013 to 20/12/2025 |
| Date of issue | 12/12/2013 |
| Date of amendment | 10/06/2020 |
| Premises details | Woodada Gas Production Facility Being part of Lot 12456 on Deposited Plan 221091 Coolimba-Eneabba Road ENEABBA WA 6518 as depicted in Schedule 1. |

| Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations</i> 1987) | Assessed production / design capacity |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Category 10: Oil or gas production from wells: premises, whether 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 stabilised crude oil, purified natural gas or liquefied hydrocarbon gases. | 50,000 tonnes per annual period |

This amended licence is granted to the licence holder, subject to the attached conditions, on 10/06/2020 by:

Amine Callegari
A/Senior Licensing Officer
Regulatory Services

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Contents

| | |
|----------------------------|----|
| Contents | 2 |
| Introduction | 2 |
| Licence conditions | 5 |
| 1 General | 5 |
| 2 Emissions | 9 |
| 3 Monitoring | 9 |
| 4 Information | 12 |
| Schedule 1: Maps and Forms | 14 |

Introduction

This Introduction is not part of the licence conditions.

DWER's industry licensing role

The Department of Water and Environment Regulation (DWER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DWER's purpose is to protect and conserve the state's environment on behalf of the people of Western Australia.

DWER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DWER 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. DWER also monitor and audit compliance with works approvals and licence conditions, take enforcement action as appropriate and develop and implement 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/licence holder 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: <https://legislation.wa.gov.au/>

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. Operating without a licence is an offence under the Act.

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

The Woodada Gas Field (WGF) is located approximately 280 km north of Perth and 13 km west of Eneabba, Western Australia, and is operated by AWE Perth Pty Ltd.

WGF was shut-in (not producing) during February 2010 and is currently under care and maintenance. The key activities in this phase include:

- Routine inspections
- Quarterly water sampling when discharging to evaporation/soakage pond
- Environmental management (rehabilitation and weed and dieback management)

When operating, the key activities at WGF include:

- Production and processing of natural gas
- Product separation
- Export of natural gas via flow lines and a connection to the Parmelia Pipeline
- Produced water management
- Condensate storage and off-loading
- Gas fired power generation
- Diesel storage and handling
- Chemical storage and handling
- Routine inspection and maintenance
- Environmental management (rehabilitation, weed and dieback management)

The process involves producing natural gas, water and condensate from a number of wells to a common facility for processing. At this point the water and condensate are separated from the flow stream. The condensate is stored in storage tanks and transported to the Kwinana Refinery. The water is discharged into an open evaporation pond. The gas is dried and pumped via compressors into the Parmelia Pipeline (Perth-Dongara gas pipeline) for sales.

This licence is the result of an amendment sought by the licence holder to reduce the frequency of groundwater monitoring due to the premises being under care and maintenance.

The licensing history for the premises since 2007 is detailed in the table below:

| Instrument log | | |
|----------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Instrument | Issued | Description |
| L6358/1995/9 | 06/12/2007 | Licence reissue |
| L6358/1995/10 | 02/12/2010 | Licence re-issue |
| L6358/1995/10 | 13/06/2013 | Licence amendment |
| L6358/1995/10 | 20/10/2016 | Amendment Notice 1 Licence amendment to remove the requirement to sample water after the heat exchanger. |
| L6358/1995/10 | 10/06/2020 | Amendment to reduce the frequency of ambient groundwater monitoring due to the premises being under care and maintenance, and remove monitoring of the produced water disposal bore which is no longer in use. |

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:

‘the Act’ means the *Environmental Protection Act 1986*;

‘AACR’ means Annual Audit Compliance Report, a report in a format approved by the CEO (relevant guidelines and templates may be available on the Department’s website).

‘annual period’ means the inclusive period from 1 July the previous year and ending on until 30 June in the following year;

‘AS/NZS 1940’ means the Australian Standard AS/NZS 1940, *The storage and handling of flammable and combustible liquids*;

‘AS/ NZS 3833’ means the Australian Standard AS/ NZS 3833, *The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers*;

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

‘AS/NZS 5667.11’ means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*;

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

‘care and maintenance’ describes processes and conditions on a closed industrial premises where there is potential to recommence operations at a later date;

‘CEMS’ means continuous emissions monitoring system;

‘CEMS Code’ means the current version of the Continuous Emission Monitoring System (CEMS) Code for Stationary Source Air Emissions, Department of Environment & Conservation, Government of Western Australia;

‘code of practice for the storage and handling of dangerous goods’ means the Storage and handling of dangerous goods - code of practice, Department of Mines and Petroleum, Government of Western Australia;

‘controlled waste’ has the definition in Environmental Protection (Controlled Waste) Regulations 2004;

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

‘CEO’ means Chief Executive Officer of the Department of Water and Environmental Regulation;

‘CEO’ for the purpose of correspondence means:

Chief Executive Officer
Department Administering the *Environmental Protection Act 1986*
Locked Bag 10
JOONDALUP DC WA 6027
Telephone: (08) 6367 7000
Facsimile: (08) 6367 7001
Email: info@dwer.wa.gov.au

‘Department’ means the department established under s.35 of the *Public Sector Management Act 1984* and designated as responsible for the administration of Division 3 Part V of the *Environmental Protection Act 1986*;

‘DWER’ means Department of Water and Environmental Regulation.

‘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, Industry Regulation and Safety;

‘fugitive emissions’ means all emissions not arising from point sources identified in sections 2.2 and 2.5;

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

‘Landfill Waste Classification and Waste Definitions 1996 (as amended)’, refers to the document issued by the Chief Executive Officer;

‘Licence’ means this licence numbered L6358/1995/11 and issued under the *Environmental Protection Act 1986*;

‘Licence Holder’ means the person or organisation named as licence holder on page 1 of the licence;

‘NATA’ means the National Association of Testing Authorities, Australia;

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

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

‘Premises’ means the area defined in the premises map in Schedule 1 and listed as the premises address on page 1 of the licence;

‘quarterly’ means the 4 inclusive periods from, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March; 1 April to 30 June.

‘Schedule 1’ means Schedule 1 of this licence unless otherwise stated;

‘shut-down’ means the period when plant or equipment is brought from normal operating conditions to inactivity;

‘spot sample’ means a discrete sample representative at the time and place at which the sample is taken;

‘start-up’ means the period when plant or equipment is brought from inactivity to normal operating conditions; and

‘usual working day’ means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia.

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

1.1.4 Any reference to a guideline or code of practice in the Licence means the current version of the guideline or code of practice.

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 Licence Holder 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 Licence Holder, 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 Licence Holder shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.2.5 The Licence Holder 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 Licence Holder shall ensure that process wastes from normal operations shall only be discharged to the environment in the following ways:

- (a) gaseous wastes through fuel consumption or combustion at the cold vent;
- (b) produced water to the evaporation pond and non-domestic liquid wastes to soakage pond;
- (c) sewage and domestic waste water to leach drains; and
- (d) solid wastes to approved landfill sites.

1.3.2 The Licence Holder shall store environmentally hazardous chemicals including fuel, oil or other hydrocarbons (where the cumulative volume of each substance stored in separate areas on the premises exceeds 250 litres) within low permeability (10^{-9} metres per second or less) compound(s) designed to contain not less than 110% of the volume of the largest storage vessel or inter-connected system, and at least 25% of the total volume of substances stored in the compound¹.

Note 1: The condensate storage tank is not in operation. Should it become operational it will be required to comply with condition 1.3.2.

1.3.3 The Licence Holder shall ensure that the compound(s) described in condition 1.3.2 shall:

- (a) be graded or include a sump to allow recovery of liquid;
- (b) be chemically resistant to the substances stored;
- (c) include valves, pumps and meters associated with transfer operations wherever practical; otherwise the equipment shall be adequately protected (eg. bollards) and contained in an area designed to permit recovery of spilled chemicals;
- (d) be designed such that jetting from any storage vessel or fitting will be captured within the bunded area (to meet the requirements of Australian Standard 1940);
- (e) be designed such that chemicals which may react dangerously if they come into contact, are either in separate impermeable bunds, in the same compound, or located in different compounds; and
- (f) be controlled such that the capacity of the bund is properly maintained (eg. regular inspection and pumping of trapped uncontaminated rain water).

1.3.4 The Licence Holder shall ensure that this facility shall:

- (a) be designed to contain not less than 110% of the volume of the largest storage vessel or inter-connected system, and at least 25% of the total volume of substances stored in the compound;
- (b) be designed to comply with condition 1.3.3;
- (c) be inspected daily for failures, leaks or spills. Leaks or spills within or outside of the storage compounds shall be recorded in a logbook together with any action required to rectify the incident or remove contaminated material;
- (d) have cathodic inspections carried out annually;
- (e) have wall thickness inspections carried out every 2 years; and
- (f) have internal inspections carried out every 4 years in order to maintain the integrity of the storage tank.

1.3.5 The Licence Holder shall maintain a record of the monthly consumption of all corrosion inhibitors and other chemicals added to the Woodada production system.

1.3.6 The Licence Holder shall ensure that data recorded under condition 1.3.5 shall be included with the Annual Environmental Report required by condition 4.2.1 of this licence, together with any available toxicity data of any other chemicals used in the system.

- 1.3.7 The Licence Holder shall record on a monthly basis, the volume of produced water being discharged to the evaporation pond associated with the Woodada process facility separator station and include this in the Annual Environmental Report required by condition 4.2.1.
- 1.3.8 The Licence Holder shall maintain a record of all flow line leaks that are detected. Each record shall identify the leaking flow line and describe the location and extent of the area affected by the flow line leak. This information shall be included in the Annual Environmental Report required by condition 4.2.1.
- 1.3.9 The Licence Holder shall ensure that all liquid wastes generated from the workshop or compressor station shall pass through interceptor recovery units to remove hydrocarbon contamination prior to being discharged to evaporation/soakage.
- 1.3.10 All domestic and industrial solid wastes, excluding toxic and hazardous solids, shall be made available for disposal off-site, at a licenced landfill.
- 1.3.11 The Licence Holder shall dispose of toxic and hazardous solids off-site, at a licenced landfill by a controlled waste carrier.

2 Emissions

2.1 General

- 2.1.1 The Licence Holder shall record and investigate the exceedance of any descriptive or numerical limit, and/or target in this section.

2.2 Odour

- 2.2.1 The Licence Holder shall ensure that odour emitted from the Premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the Premises.

3 Monitoring

3.1 General monitoring

- 3.1.1 The Licence Holder shall ensure that:
 - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
 - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
 - (c) all surface water sampling is conducted in accordance with AS/NZS 5667.4, AS/NZS 5667.6 or AS/NZS 5667.9 as relevant;
 - (d) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;
 - (e) all laboratory samples are submitted to a laboratory with current NATA accreditation for the parameters to be measured [unless indicated otherwise in the relevant table]; and
 - (f) all water samples shall be analysed in accordance with the current "Standard Methods for Examination of Water and Waste water-APHA-AWWA-WEF".
- 3.1.2 The Licence Holder shall ensure that :

- (a) quarterly monitoring is undertaken at least 45 days apart; and
- (b) annual monitoring is undertaken at least 9 months apart.

- 3.1.3 The Licence Holder shall record production or throughput data and any other process parameters relevant to any non-continuous or CEMS monitoring undertaken.
- 3.1.4 The Licence Holder shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification, or any relevant and effective internal management system.
- 3.1.5 The Licence Holder shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods

3.2 Monitoring of point source emissions to air

- 3.2.1 The Licence Holder shall, where practicable, record the quantity and composition of all normal operations gaseous emissions vented to the atmosphere from facilities directly associated with gas and condensate production including the quantity of gas combusted at the cold vent at Woodada.
- 3.2.2 The Licence Holder shall ensure that all non-continuous sampling and analysis undertaken is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.
- 3.2.3 The Licence Holder shall record all known accidental/emergency gaseous emissions vented to the atmosphere from the licensed premises. Following any such emission an investigation shall be promptly conducted. An incident report, containing a full description of what caused the event, any environmental impacts, which occurred, and the action taken to prevent the event recurring, shall be prepared and submitted to the CEO.

3.3 Monitoring of ambient groundwater quality

- 3.3.1 The Licence Holder shall undertake the monitoring in Table 3.3.1 according to the specifications in that table.

| Table 3.3.1: Monitoring of ambient groundwater quality | | | |
|--------------------------------------------------------|--------------------------------------------------------------|--------------------|-----------|
| Emission point reference | Parameter | Units ¹ | Frequency |
| All monitoring bores on site – MB1, MB2 and MB3 | (i) arsenic (As); | mg/L | Annually |
| | (ii) barium (Ba); | | |
| | (iii) cadmium (Cd); | | |
| | (iv) chromium (Cr); | | |
| | (v) copper (Cu); | | |
| | (vi) iron (Fe); | n/a | |
| | (vii) lead (Pb); | | |
| | (viii) strontium (Sr); | | |
| | (ix) zinc (Zn); | | |
| | (x) chemical oxygen demand (COD); | | |
| | (xi) Total Petroleum Hydrocarbons (TPH); | m | |
| | (xii) light fraction organic compounds (eg. BTEX compounds); | | |
| | (xiii) Total Dissolved Solids (TDS); | | |
| | (xiv) pH; and | n/a | |
| | (xv) standing water level (SWL). | m | |

Note 1: Milligrams per litre – mg/L; Metres - m

3.4 Monitoring of emissions to land

3.4.1 The Licence Holder shall undertake the monitoring in Table 3.4.1 according to the specifications in that table.

| Table 3.4.1: Monitoring of emissions to land | | | |
|--------------------------------------------------|--------------------------------------------------------------|--------------------|----------------------------------------------------------|
| Emission point reference | Parameter | Units ¹ | Frequency |
| Produced water disposal evaporation/soakage pond | (i) arsenic (As); | mg/L | Quarterly - in each quarter that discharge occurs within |
| | (ii) barium (Ba); | | |
| | (iii) cadmium (Cd); | | |
| | (iv) chromium (Cr); | | |
| | (v) copper (Cu); | | |
| | (vi) iron (Fe); | n/a | |
| | (vii) lead (Pb); | | |
| | (viii) strontium (Sr); | | |
| | (ix) zinc (Zn); | | |
| | (x) chemical oxygen demand (COD); | | |
| | (xi) Total Petroleum Hydrocarbons (TPH); | | |
| | (xii) light fraction organic compounds (eg. BTEX compounds); | | |
| | (xiii) Total Dissolved Solids (TDS); and | | |
| | (xiv) pH. | n/a | |

Note 1: Milligrams per litre – mg/L.

4 Information

4.1 Records

- 4.1.1 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 4.1.1(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.
- 4.1.2 The Licence Holder 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.
- 4.1.3 The Licence Holder shall complete an Annual Audit Compliance Report indicating the extent to which the Licence Holder 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.
- 4.1.4 The Licence Holder 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.

4.2 Reporting

4.2.1 The Licence Holder shall submit to the CEO an Annual Environmental Report within 84 calendar days after the end of the annual period (i.e. 30 September). The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

| Table 4.2.1: Annual Environmental Report | | |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Condition or table (if relevant) | Parameter | Format or form¹ |
| - | 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 |
| 1.3.5 | Monthly Chemical Consumption record | None specified |
| 1.3.6 | Toxicity Data Records | None specified |
| 1.3.8 | Flow Line Leak Record | None specified |
| 3.3.1 | Monitoring of ambient groundwater quality | GR1 |
| 3.4.1 | Monitoring of emissions to land | GR1 |
| 4.1.3 | Compliance | Annual Audit Compliance Report (AACR) |
| 4.1.4 | Complaints summary | None specified |

Note 1: Forms are in Schedule 1

- 4.2.2 The Licence Holder shall ensure that the Annual Environmental Report also contains:
- (a) any relevant process, production or operational data recorded under Condition 3.1.3;
 - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits and/or targets; and
 - (c) a list of any original monitoring reports submitted to the Licence Holder from third parties for the annual period and make these reports available on request.

4.3 Notification

- 4.3.1 The Licence Holder shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

| Table 4.3.1: Notification requirements | | | |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Condition or table (if relevant) | Parameter | Notification requirement¹ | Format or form² |
| - | Site brought out of care and maintenance | Notification three (3) months prior to the proposed 'start-up' date of the premises. | None specified |
| - | 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 |

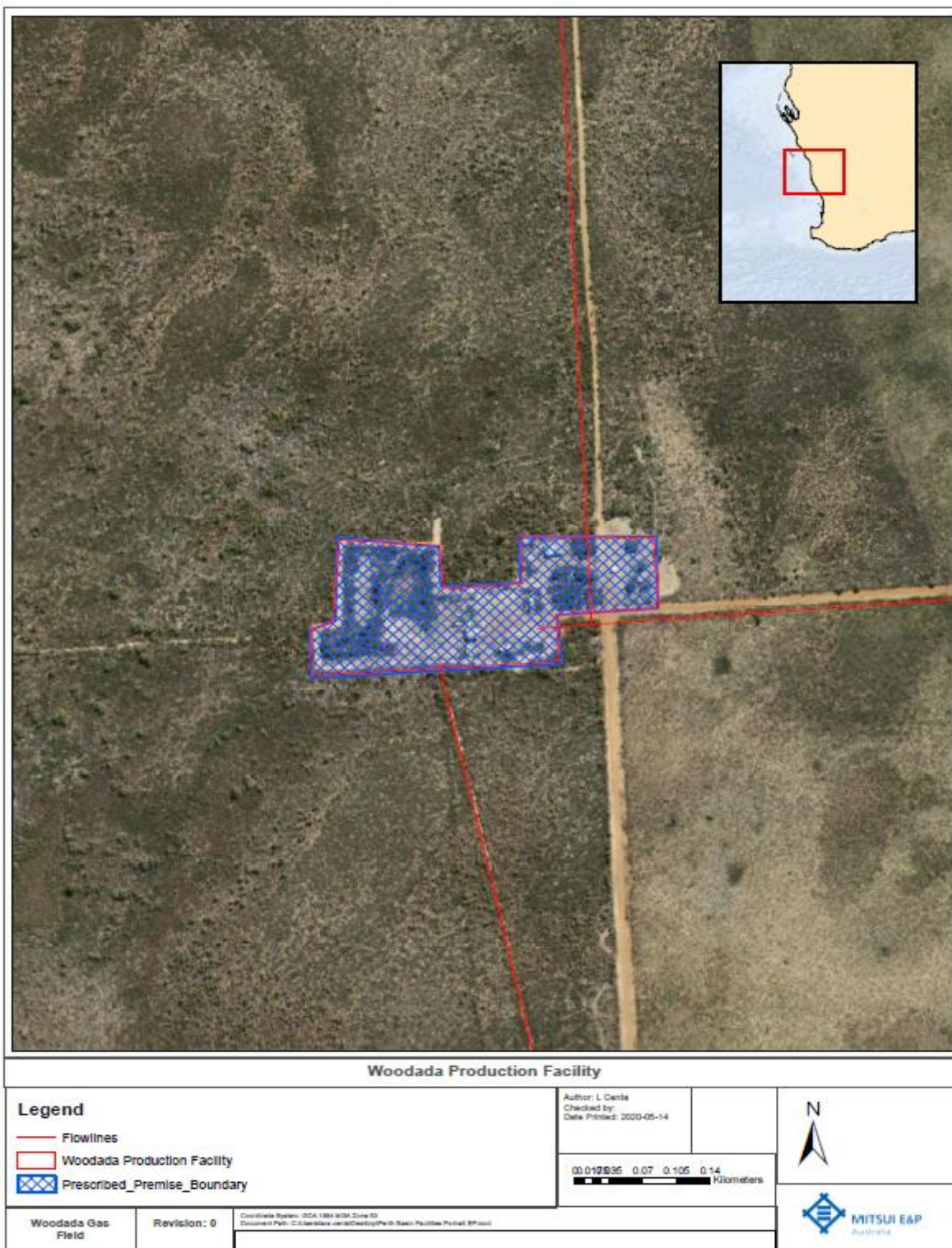
Note 1: Notification requirements in the licence shall not negate the requirement to comply with s72 of the Act

Note 2: Forms are in Schedule 1

Schedule 1: Maps and Forms

Premises map

The premises is shown in the map below. The pink line depicts the premises boundary (map supplied by applicant).



Map of monitoring locations

The locations of the monitoring points are shown below (map supplied by applicant)



Licence: L6358/1995/11
Form: GR1
Name: Monitoring of ambient groundwater quality

Licence Holder: AWE Perth Pty Ltd
Period:

| Form GR1: Monitoring of ambient groundwater quality | | | | | |
|--------------------------------------------------------------------------|-------------------------------------------------------|---------------------|------------------|-------------|---------------------|
| Monitoring point | Parameter | Result ¹ | Averaging period | Method | Sample date & times |
| MB1, MB2 and MB3 Produced water disposal evaporation/soakage pond | Arsenic (As) | mg/L | Annual | Spot Sample | |
| | Barium (Ba) | | | | |
| | Cadmium (Cd) | | | | |
| | Chromium (Cr) | | | | |
| | Copper (Cu) | | | | |
| | Iron (Fe) | | | | |
| | Lead (Pb) | | | | |
| | Strontium (Sr) | | | | |
| | Zinc (Zn); | | | | |
| | Chemical oxygen demand (COD) | | | | |
| | Total Petroleum Hydrocarbons (TPH) | | | | |
| | Light fraction organic compounds (eg. BTEX compounds) | | | | |
| | Total Dissolved Solids (TDS) | | | | |
| | pH | n/a | | | |
| | Standing water level | m | | | |

Signed on behalf of AWE Perth Pty Ltd:

Date:



Form N1:

Licence: L6358/1995/11 Licence Holder: AWE Perth Pty Ltd
Form: N1 Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

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

PART A

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

| Notification requirements for the breach of a limit | |
|---------------------------------------------------------------|--|
| Emission point reference/ source | |
| Parameter(s) | |
| Limit | |
| Measured value | |
| Date and time of monitoring | |
| Measures taken, or intended to be taken, to stop the emission | |

| 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 AWE Perth Pty Ltd | |
| Date | |