

# Licence

Licence number	L8777/2013/1
Licence holder ACN	Buru Energy Limited 130 651 437
Registered business address	Level 2 88 William Street PERTH WA 6850
DWER file number	DER2014/000609-2
Duration	14/11/2013 to 17/11/2034
Date of amendment	19 December 2022
Premises details	Ungani Production Facility Petroleum Production Licences L20 and L21
	GEEGULLY CREEK 6728 As defined by the coordinates in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production or 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.	244,359 tonnes per year

This licence is granted to the licence holder, subject to the attached conditions, on 19 December 2022, by:

#### MANAGER, PROCESS INDUSTRIES

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

# Licence history

Date	Reference number	er Summary of changes		
14/11/2013		Licence granted.		
30/10/2014		Authorised expansion of the Premises boundary to incorporate a second turkey nest dam, constructed in January 2014 for the drilling of the Ungani 3 well.		
3/9/2015		Authorised the use of a floating evaporator on the Ungani 3 turkey nest dam in order to enhance evaporation rates of produced formation water (PFW) stored in the dam.		
29/4/2016		Extended the duration of licence from 17/11/2018 to 17/11/2034.		
25/5/2017	L8777/2013/1	Authorised the construction and operation of new water handling and oil storage infrastructure and removal of existing infrastructure not required following the upgrades.		
20/12/2017		Amendment Notice 1: to authorise an increase in production design capacity associated with the drilling of new petroleum wells and installation of new oil and produced water storage infrastructure.		
20/08/2018		Amendment Notice 2: to authorise the configuration of new and existing wells on the premises and construction of additional in-field flowlines and oil storage tanks and change of boundary.		
01/02/2019		Amendment to consolidate previous Amendment Notices, authorise infrastructure associated with two new wells to be installed at the premises and update premises boundary.		
19/12/2022		Amendment application to add reinjection wells as emission points.		

## Interpretation

In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

## **Licence conditions**

The licence holder must ensure that the following conditions are complied with:

## Works

1. The licence holder shall carry out the works listed in Table 1 in accordance with the corresponding specifications set out in Table 1.

Works	Specifications		
Ungani North 1	<ul> <li>Installation of:</li> <li>1 x 110kL oil storage tank enclosed within HDPE bunded area that is lined to achieve a permeability of less than 2 x 10<sup>-9</sup> m.s<sup>-1</sup> and has a minimum containment capacity of 123m<sup>3</sup>; and</li> <li>Production Flowline between Ungani Central Facility and Ungani North 1 well site</li> </ul>		
Ungani 6	<ul> <li>Installation of:         <ul> <li>1 x 110kL oil storage tank enclosed within HDPE bunded area that is lined to achieve a permeability of less than 2 x 10<sup>-9</sup> m.s<sup>-1</sup> and has a minimum containment capacity of 123m<sup>3</sup>; and</li> <li>Production Flowline between Ungani Central Facility and Ungani 6 well site</li> </ul> </li> </ul>		
Ungani South A	<ul> <li>Installation of:         <ul> <li>1 x 110kL oil storage tank enclosed within HDPE bunded area that is lined to achieve a permeability of less than 2 x 10<sup>-9</sup> m.s<sup>-1</sup> and has a minimum containment capacity of 123m<sup>3</sup>; and</li> <li>Production Flowline between Ungani Central Facility and Ungani South A well site</li> </ul> </li> </ul>		

- 2. The licence holder must not depart from the specifications listed in Table 1 except:
  - (a) where such departure does not increase risks to public health, public amenity, or the environment; and
  - (b) all other conditions in this licence are still satisfied.
- **3.** Within 14 days of the completion of the works specified in Table 1, the licence holder must provide to the CEO written confirmation (including photographic evidence) confirming each item of infrastructure listed in Table 1 has been constructed with no material defects and to the corresponding specifications listed in Table 1.
- **4.** Where a departure from the requirements specified in Table 1 occurs and is of a type allowed by condition 2 the licence holder must provide to the CEO a description of, and explanation for, the departure along with the certification required by condition 3.

## Infrastructure and equipment

**5.** The licence holder must ensure that the site infrastructure and equipment specified in Table 2 and located at the corresponding infrastructure location is maintained operated in accordance with the corresponding operational requirements specified in Table 2.

Site infrastructure and equipment	Operational requirement	Infrastructure Location
<ul> <li>2 x segregation tanks with capacity of 205kL;</li> <li>3 x produced formation water (PFW) storage tanks with combined capacity of 175kL;</li> <li>5 x oil stock (storage) tanks with combined capacity of 829kL;</li> <li>2 x well test (temporary segregation) tanks with combined storage of 136kL</li> </ul>	<ul> <li>Located in bunded areas that are lined to achieve a permeability of less than 2 x 10<sup>-9</sup> m.s<sup>-1</sup>.</li> <li>Sized to accommodate 110% of the capacity of the largest tank in the bund</li> </ul>	As shown in Schedule 1: Premises Layout Map
Turkey's Nest Dam Road tanker load out facility and refuelling facility	<ul> <li>Lined with a synthetic material to achieve a permeability of less than 1 x 10<sup>-9</sup> m.s<sup>-1</sup>.</li> <li>A freeboard equal to, or greater than, 500mm is maintained</li> <li>Bunded and lined with a synthetic material to achieve a permeability of less than 1 x 10<sup>-9</sup> m.s<sup>-1</sup>.</li> </ul>	
	<ul> <li>Stormwater drains to sump with oil-water separator installed to treat stormwater prior to discharge.</li> </ul>	

 Table 2: Infrastructure and equipment controls table

## **Premises operation**

#### **Reinjection of produced formation water**

**6.** The licence holder must ensure that the emissions specified in Table 3, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

#### Table 3: Authorised discharge points for PFW

Emission	Discharge point	Discharge point location
Produced formation water	Ungani West 1	As shown in Schedule 1:
(PFW)	Ungani 3	Premises map
	Ungani 4	

#### **Emissions to land**

**7.** The licence holder must ensure that the emissions specified in Table 4, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

#### Table 4: Authorised discharge points for emissions to land

Emission	Discharge point location
Treated stormwater from the outlet pipe of the Stormwater Oil-	L1 as shown in Schedule 1
Water Separator	(Monitoring Locations Map)

#### **Emissions to land limits**

**8.** The licence holder must not cause or allow emissions to land greater than the limits listed in Table 5.

#### Table 5: Emissions to land limits

Monitoring point reference as defined in Schedule 1 (Monitoring Locations Map)	Parameter	Limit	Units	Averaging Period
L1	Total Recoverable Hydrocarbons	15	mg/L	Spot sample

## Monitoring

#### General

- **9.** The licence holder shall ensure that:
  - a) monitoring is undertaken in each annual period such that there are at least 9 months in between the days on which samples are taken in successive years; and
  - b) monitoring is undertaken in each quarterly period such that there are at least 45 days in between the days on which samples are taken in successive quarters.

**10.** The licence holder must record the results of all monitoring activity required by conditions 11 and 12.

### **Emissions to Land Monitoring**

**11.** The licence holder shall undertake the monitoring in Table 6 according to the specifications in that table.

#### Table 6: Monitoring Requirements – emissions to land

Monitoring point	Parameter	Units	Inits Averaging Frequency period	Method		
reference and location as defined in Schedule 1 (Monitoring Locations Map)			penou		Sampling	Analysis
L1	Total Recoverable Hydrocarbons	mg/L	Spot sample	Annually: at least once per year during periods of discharge from the outlet pipe of the Stormwater Oil-Water Separator	AS/NZS 5667.1 and AS/NZS 5667.10	NATA accredited for the parameters specified

#### **Groundwater Monitoring**

**12.** The licence holder must undertake the monitoring in Table 7 according to the specifications in that table.

#### Table 7: Monitoring Requirements - ambient groundwater quality

Monitoring point	Parameter	Units	Averaging period	Frequency	Method	
reference and location as defined in Schedule 1 (Monitoring Locations Map)			penou		Sampling	Analysis
GQ2 and	Standing water level	m (AHD) m (BGL)	Spot	Quarterly	AS/NZS 5667.1 and AS/NZS 5667.11	In-field
GQ3	Total Recoverable Hydrocarbons	mg/L	sample			NATA accredited for the parameters specified

## **Records and reporting**

- **13.** The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
  - (a) the name and contact details of the complainant, (if provided);
  - (b) the time and date of the complaint;
  - (c) the complete details of the complaint and any other concerns or other issues raised; and
  - (d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
- **14.** The licence holder must:
  - (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
  - (b) prepare and submit to the CEO, by no later than 31 August in each year, an Annual Audit Compliance Report in the approved form.
- **15.** The licence holder must submit to the CEO by no later than 31 August 2023 (and biennially thereafter), an Annual Environmental Report for the two previous annual periods for the conditions listed in Table 8, and which provides information in accordance with the corresponding requirement set out in Table 8.

#### **Table 8: Annual Environmental Report**

Condition	Requirement
11	Emissions to land monitoring – tabulated discharge water quality results from the outlet of the Stormwater Oil-Water Separator to determine compliance with discharge limit set out in condition 9
12	Ambient groundwater quality monitoring - Tabulated groundwater monitoring data results and an interpretation of monitoring data results including comparison of historical data to determine trends

- **16.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
  - (a) the calculation of fees payable in respect of this licence;
  - (b) the works conducted in accordance with condition 1 of this licence;
  - (c) any maintenance of infrastructure that is performed in the course of complying with condition 5 of this licence;
  - (d) monitoring programmes undertaken in accordance with conditions 10, 11, and 12 of this licence; and
  - (e) complaints received under condition 13 of this licence.
- **17.** The books specified under condition 16 must:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;

#### Department of Water and Environmental Regulation

- (c) be retained by the licence holder for the duration of the licence; and
- (d) be available to be produced to an inspector or the CEO as required.

## **Definitions**

In this licence, the terms in 9 have the meanings defined.

#### Table 9: Definitions

Term	Definition
ACN	Australian Company Number
AHD	means the Australian height datum
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	means a 12 month period commencing from 1 July until 30 June in the following year.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.
AS/NZS 5667.10	Means the Australian Standard AS/NZS 5667.10 Water quality - Sampling - Guidance on sampling of waste waters
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 is measured, or a monitoring result is obtained.
BGL	means below ground level.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department.
	"submit to / notify the CEO" (or similar), means either:
	Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919
	or:
	info@dwer.wa.gov.au
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.

## Department of Water and Environmental Regulation

Term	Definition
EP Act	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
freeboard	means the distance between the maximum water surface elevations and the top of the retaining banks or structures at its lowest point.
HDPE	means High Density Poly Ethylene
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
NATA	means National Association of Testing Authorities
PFW	means produced formation water
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Spot sample	means a discrete sample representative at the time and place at which the sample is taken.
waste	has the same meaning given to that term under the EP Act.
works	means the infrastructure and equipment listed in condition 2 of this licence to be carried out at the premises, subject to the conditions of this licence.

### **END OF CONDITIONS**

## Schedule 1: Maps

## **Premises map**

The boundary of the prescribed premises is shown in the map below (Figure 1).

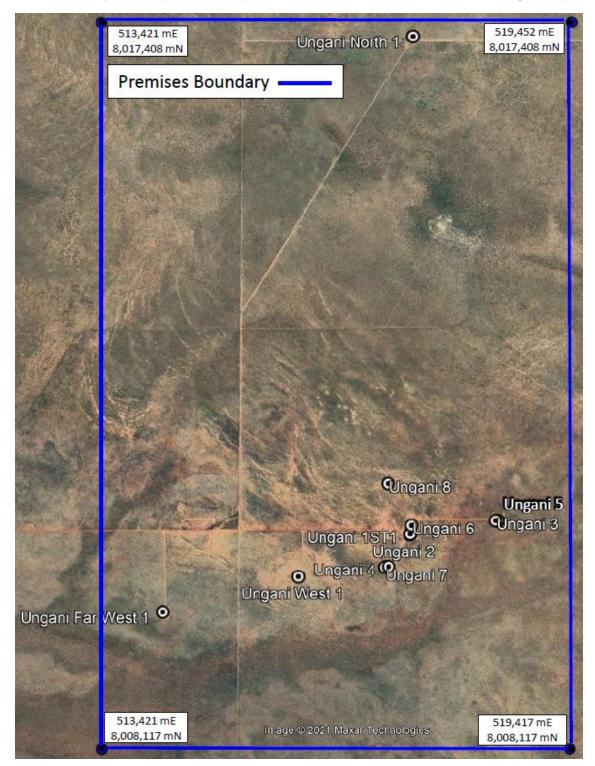
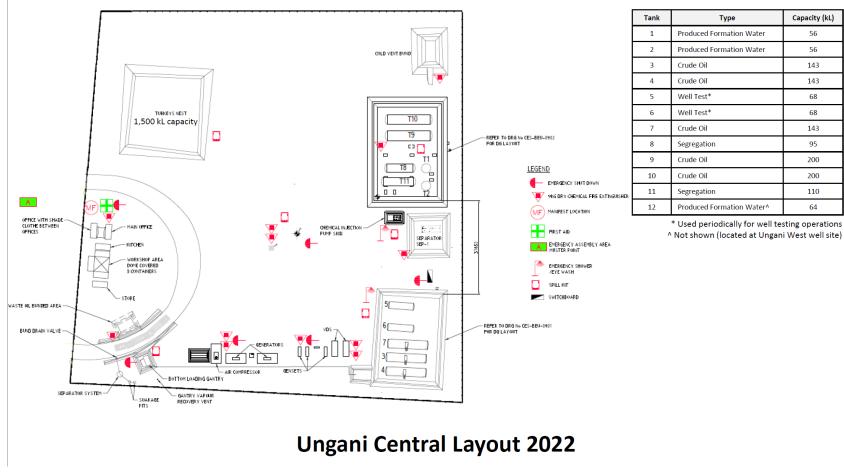


Figure 1: Map of the boundary of the prescribed premises (boundary shown in blue).

### **Premises layout map**

The layout of the Ungani Central Processing Area is shown in the map below (Figure 2).

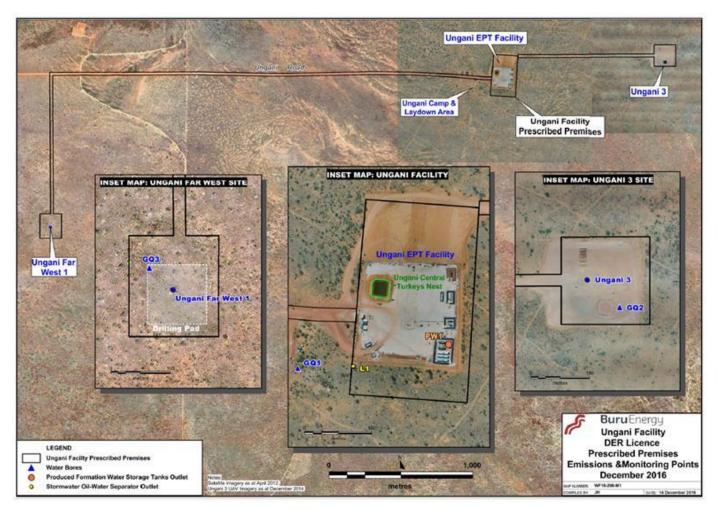


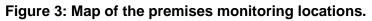


L8777/2013/1

## **Monitoring locations map**

The premises monitoring locations as defined by conditions 12 and 13 are shown in the map below (Figure 3).





L8777/2013/1