



Licence

Licence number	L8096/2005/5
Licence holder	Triangle Energy (Operations) Pty Ltd
ACN	083 143 382
Registered business address	Unit 7, 589 Stirling Highway COTTESLOE WA 6011
DWER file number	2010/003448-1
Duration	03/04/2024 to 02/04/2044
Date of issue	02/04/2024
Premises details	Arrowsmith Stabilisation Plant Brand Highway DONGARA WA 6525 Legal description - Lot 12 on Deposited Plan 60310 As defined in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 10: Oil and 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.	700,000 tonnes of crude oil per year.

This licence is granted to the licence holder, subject to the attached conditions, on 2 April 2024 by:

Lesley Hart

**SENIOR ENVIRONMENTAL OFFICER
REGULATORY SERVICES**

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

Licence history

Date	Reference number	Summary of changes
21/12/2017	L8096/2005/4	Licence transferred from ROC Oil (WA) Pty Limited to Triangle Energy (Operations) Pty Ltd
19/03/2019	L8096/2005/4	Amendment Notice 1 – Licence expiry date corrected to 2 April 2024
02/04/2024	L8096/2005/5	Licence renewed for twenty years.

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:

Infrastructure and equipment

1. The licence holder must immediately recover or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

Emissions and discharges

Authorised discharge points for emissions to air and groundwater

2. The licence holder must ensure that the emissions specified in Table 1, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 1: Authorised discharge points

Emission	Discharge point	Discharge point location
Waste gases from processing facility	A1 - Gas flare system.	As shown in Schedule 1: Map of authorised discharge points
Produced Formation Water (PFW)	D1 - direct injection into CHOWS water injection well.	

Monitoring

General monitoring

3. The licence holder must 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; and
 - (c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.
4. The licence holder must ensure that :
 - (a) monthly monitoring is undertaken at least 15 days apart;
 - (b) quarterly monitoring is undertaken at least 45 days apart; and
 - (c) annual monitoring is undertaken at least 9 months apart.

Monitoring of emissions to air

5. The licence holder must undertake the monitoring in Table 2 according to the specifications in that Table.

Table 2: Monitoring of point source emissions to air

Discharge point	Parameter	Units	Frequency	Method
A1	Total volume gas flared	m ³	Annually	NPI Calculation – emission estimation technique
	Carbon monoxide (CO)	g/min		
	Hydrogen sulphide (H ₂ S)			
	Nitrogen dioxide (NO ₂)			
	Sulphur dioxide (SO ₂)			

6. The licence holder must undertake the monitoring in Table 3 according to the specifications in that Table.

Table 3: Monitoring of point source emissions to groundwater

Discharge point	Parameter	Units	Frequency
D1	Volumetric flow rate	m ³ /day	Monthly
	Total dissolved solids (TDS)	mg/L	Quarterly
	Total Nitrogen (N)		
	Total Petroleum Hydrocarbons (TPH)		
	pH ¹	N/A	
	Arsenic (As)	mg/L	Annually
	Cadmium (Cd)		
	Chromium (Cr)		
	Nickel (Ni)		
	Zinc (Zn)		
	Zinc (Zn)		
	Copper (Cu)		
	Lead (Pb)		
	Mercury (Hg)		
	Molybdenum (Mo)		
Manganese (Mn)			

Note 1: In-field non-NATA accredited analysis permitted.

Process monitoring

7. The licence holder must undertake the monitoring in Table 4 according to the specifications in that table.

Table 4: Process monitoring

Process description	Parameter	Units	Frequency	Method
Chemical injection system	Consumption of chemical treatment agents	m ³	Monthly	None specified

Records and reporting

8. 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:
- the name and contact details of the complainant, (if provided);
 - the time and date of the complaint;
 - the complete details of the complaint and any other concerns or other issues raised; and
 - the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
9. The licence holder must:
- undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
 - prepare and submit to the CEO an Annual Audit Compliance Report in the approved form by **31 March** each year.
10. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
- the calculation of fees payable in respect of this licence;
 - monitoring programmes undertaken in accordance with conditions 5, 6 and 7 of this licence; and
 - complaints received under condition 8 of this licence.
11. The books specified under condition 10 must:
- be legible;
 - if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - be retained by the licence holder for the duration of the licence; and
 - be available to be produced to an inspector or the CEO as required.

12. The licence holder must submit to the CEO by no later than 90 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 5, and which provides information in accordance with the corresponding requirement set out in Table 5.

Table 5: Annual Environmental Report

Condition	Requirement
5 & 6	Volume of gas flared
	Monitoring of point source emissions to air
	Monitoring of point source emissions to groundwater
7	Monthly consumption of chemical treatment agents added to ASP production system
8	Complaints summary

13. The licence holder must ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results.

Notification

14. The licence holder must ensure that the parameters listed in Table 6 are notified to the CEO in accordance with the notification requirements of the table.

Table 6: Notification requirements

Condition	Parameter	Notification requirement ¹	Format or form ²
7	Toxicity data for new treatment chemicals used in the chemical injection system	Within 3 weeks of the introduction of the new chemical	None specified

Definitions

In this licence, the terms in Table 7 have the meanings defined.

Table 7: Definitions

Term	Definition
ACN	Australian Company Number
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	a 12 month period commencing from 1 January until 31 December of the immediately following year.
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.
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)
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 the National Association of Testing Authorities, Australia.
NPI Calculation – emission estimation technique	means the National Pollutant Inventory, Emission Estimation Technique Manual for Oil and Gas Extraction and Production version 2.0, Department of Sustainability, Environment, Water, Population and Communities, July 2013 (as amended).
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.
waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

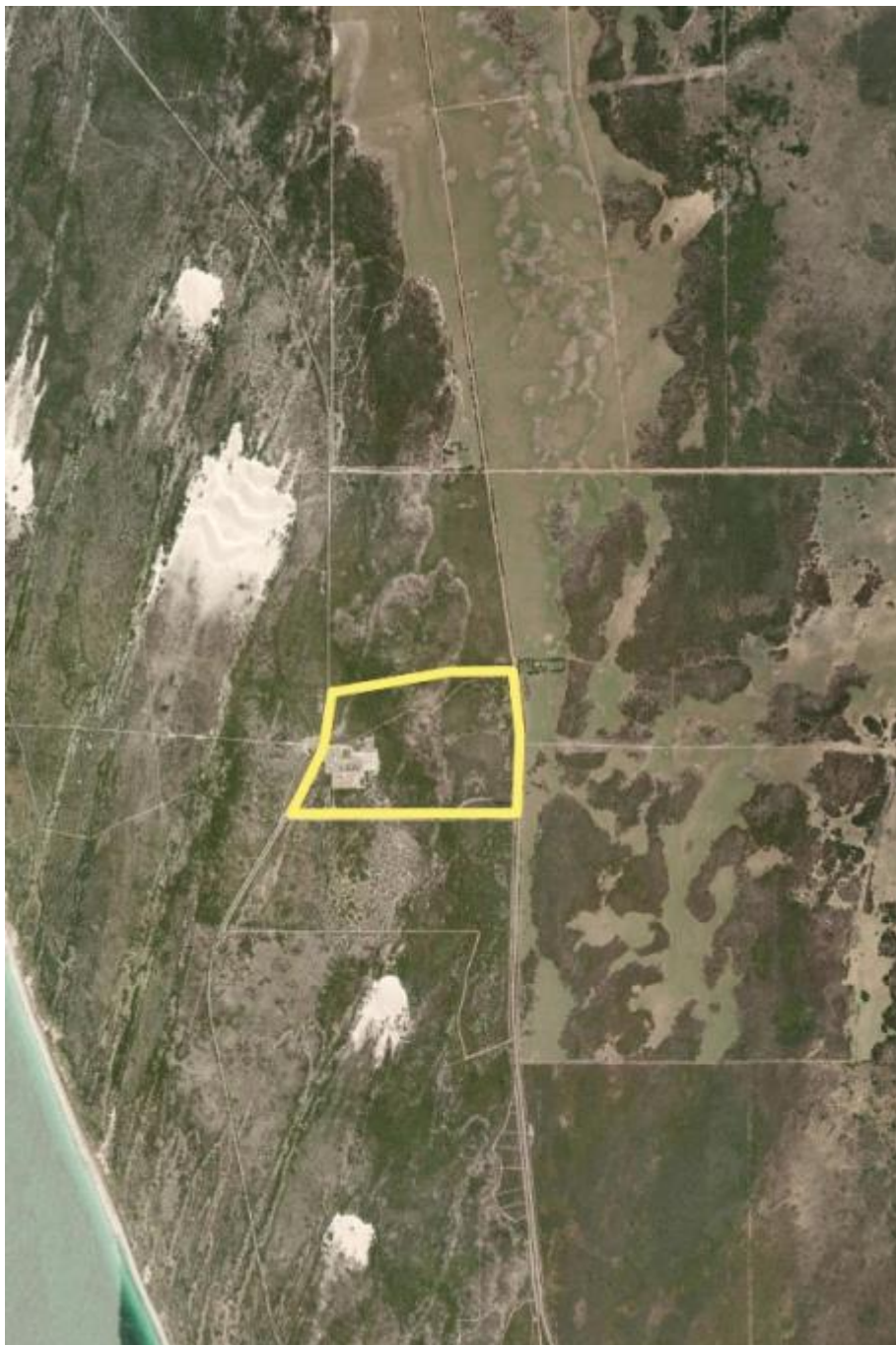


Figure 1: Map of the boundary of the prescribed premises

Map of emission points

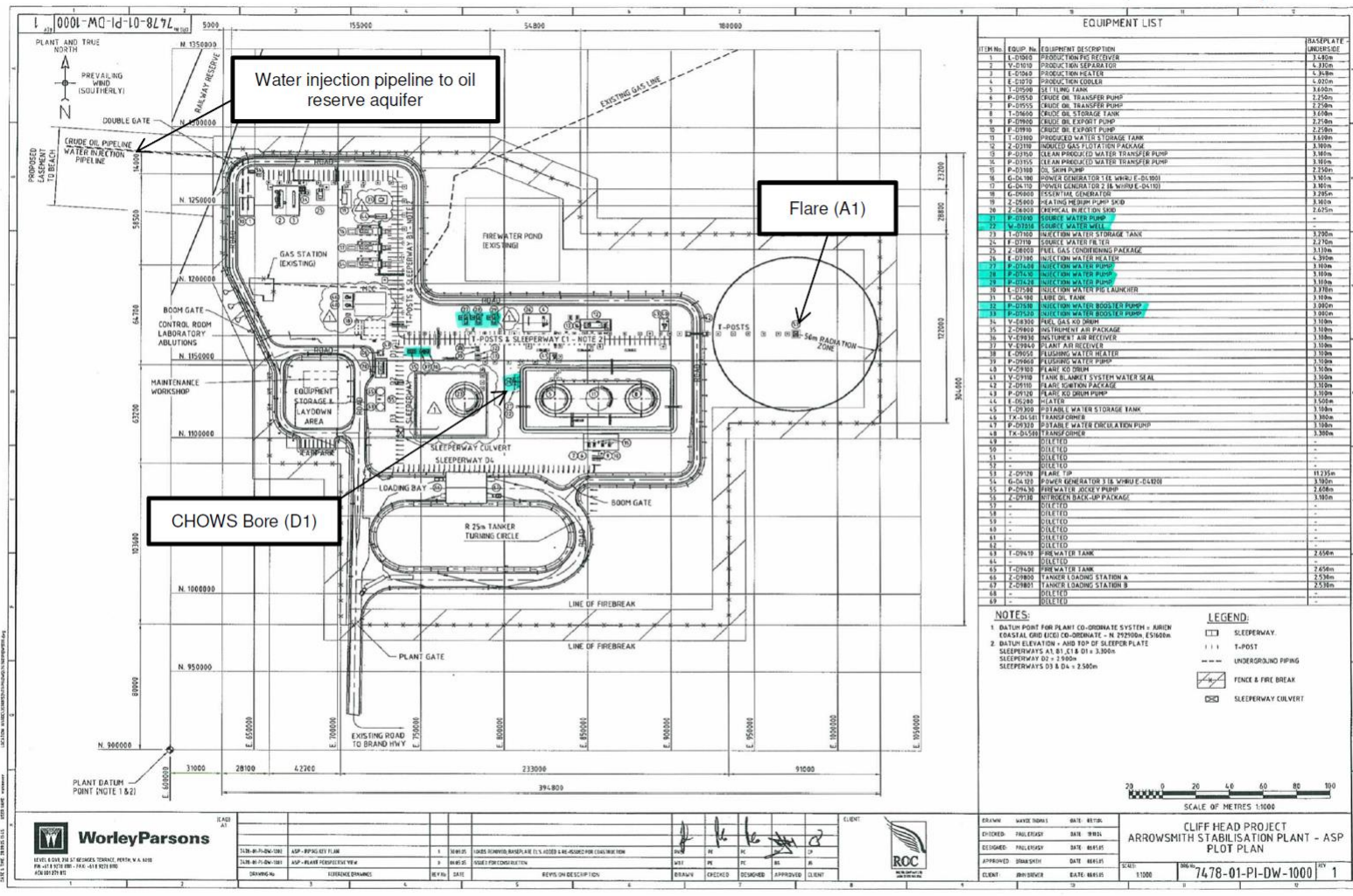


Figure 2: Map of the emission and discharge points