Licence number L4467/1972/14

Licence holder Chevron Australia Pty Ltd

ACN 086 197 757

Registered business address Unit 7, 61 Walters Drive

OSBORNE PARK WA 6017

DWER file number DER2013/000939-4

Duration 01/11/2014 to 31/10/2026

Date of amendment 20 October 2020

Premises details Barrow Island Oil and Gas Facility

Crown Reserve 11648

BARROW ISLAND WA 6712

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production 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 stabilized crude oil, purified natural gas or liquefied hydrocarbon gases	310,886.5 tonnes per year
Category 57: Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored	300 tyres

This revised licence is granted to the licence holder, subject to the attached conditions, on 20 October 2020, by:

MANAGER, PROCESS INDUSTRIES REGULATORY SERVICES

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

Licence history

Date	Instrument	Summary of changes
23/10/2014	L4467/1972/14	Licence issued.
9/03/2017	L4467/1972/14	Amendment to change groundwater monitoring regime at the Terminal Tanks oil storage facility.
13/12/2018	L4467/1972/14	Amendment to add prescribed premises Category 57 (used tyre storage) and Category 85 (sewage facility) to licence. In addition, construction, commissioning and operational requirements added for a new bioremediation facility and WWTP and a new requirement to monitor treated effluent discharged to surface water. Conditions relating to the reinjection of Produced Formation Water (PFW) were removed given the disposal of PFW is not regulated through Part V of the EP Act.
20/10/2020	L4467/1972/14	Licence holder initiated amendment to remove Category 85, associated infrastructure operational requirements and monitoring, sampling and reporting of surface water emissions. Redundant requirements relating to construction and commissioning works were also removed. Licence updated to current format

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.

Conditions

Infrastructure and equipment

1. The licence holder must ensure that the site infrastructure and equipment specified in Table 1 is maintained in good working order and operated in accordance with the corresponding operational requirements specified in that table.

Table 1: Infrastructure and equipment controls table

Site infrastructure and equipment	Operational requirements	
Terminal Tank Facility and associated Terminal Stormwater Receiver	Three crude oil storage tanks (each tank with capacity of 31,800,000L) positioned within a bunded containment area with a hydraulic permeability of less than 1x10 ⁻⁴ m/s.	
	The integrity of the containment infrastructure is maintained	
	Contaminated stormwater to be transferred to L71 Liquid Waste Disposal Facility	
L71 Liquid Waste Disposal Facility	Two double lined HDPE evaporation ponds with combined approximate capacity of 1,990m³ (excluding freeboard) operated such that: • Overtopping of the ponds does not occur; • A freeboard equal to, or greater than, 300mm is maintained; • The integrity of the containment infrastructure is maintained; and • Only the following waste types are accepted: • Contaminated stormwater; • Waste oil and water mixtures or emulsions, and hydrocarbon and water mixtures or emulsions; • Oil interceptor wastes; and • Industrial Wash Waters.	
Bioremediation facility	Bund and liner is maintained to comply with AS 1940:2017	
	Contaminated material to be deposited in windrows	
	Capacity of stormwater system to be maintained to allow storage for a 1 in 20 ARI 72 hour storm event.	
Used Tyre Storage of up to 300 tyres on the Premises	Tyres to be stored in non-combustible transportable waste receptacles and removed off the Island for recycling as required	

Ambient groundwater quality monitoring

- **2.** The licence holder must monitor the groundwater for concentrations of the parameters listed in Table 2:
 - (a) at the corresponding monitoring point location and reference;
 - (b) in the corresponding unit;
 - (c) at no less that the corresponding frequency; and
 - (d) for the corresponding averaging period,

as set out in Table 2.

Table 2: Monitoring of ambient groundwater quality

Monitoring point location and reference	Parameter	Units	Averaging period	Frequency
CPF (satellite and tanks)	TRH		0	Quarterly
CPF-MW1R to CPF-MR4R	BTEX		Spot sample	
	TRH	mg/L	Spot sample	Quarterly
Bioremediation Facility	BTEX			
GW82, GW83 and GW85	PAH		Spot sample if TRH is present	
	PSH	mm	Spot sample	
Tamainal Tanka and	Alkalinity (total) as CaCO ₃			
Terminal Tanks and Terminal Tank Stormwater	Calcium			
Receiver	Magnesium			
TT-GW06, TT-GW14, TT- GW21, TT-GW32, TT-	Sodium	-	Spot sample if	
GW41, TT-GW50, TT- MW04, TT-MW18, TT-	Potassium		no PSH is detected	Six monthly
MW21, TT-MW25, TT- MW26, TT-MW27, TT-	Sulfate	-		
MW28, TT-MW31, TT-	Chloride	-		
MW34, TT-MW38, TT-	Flouride	=		
MW39, TT-MW41,	TRH	mg/L		
	PAH		Spot sample if TRH is present	
	TRH		Spot cample	Quartorly
	BTEX			
	Arsenic			
	Cadmium			
L71 Liquid Waste Disposal Facility	Chromium	Spot sample		
L71-MW1 to L71-MW4	Copper		Quarterly	
	Lead			
	Mercury			
	Nickel			
	Zinc			
Airport Facilities	PSH	mm	Spot sample	
	Dissolved Oxygen	mg/L		
AP-MW3, AP-MW4A, AP-	рН	pH units		
MW5, AP-MW11, AP-	Redox Potential,	mV	Spot sample if no PSH is detected	Annual
MW12A, AP-MW13A, AP- MW18, AP-MW19, AP-	Temperature	°C		
MW23, AP-MW32	Electrical Conductivity	μS/cm	dototied	
	Ferrous Iron	mg/L		

Monitoring point location and reference	Parameter	Units	Averaging period	Frequency
	Sulphate (Filtered)	mg/L		
	Nitrate (as N)	mg/L		
	BTEX	mg/L		
	TRH	mg/L		
	PAH	mg/L	Spot sample if TRH is present	
Central Power Station B-MW3	TRH	mg/L		
Compressor Station B-MW4	TRH	mg/L		
Pipe work connecting base administration facilities, J Station flare and J Satellite Station to flare pit B-MW5	TRH	mg/L	Spot sample	Quarterly
Riggers Yard B-MW2	TRH	mg/L		
Warehouse and adjacent chemical and hazardous materials storage B-MW1	TRH	mg/L		
Heavy and light duty work shops B-MW6 and B-MW7	TRH	mg/L		

3. The licence holder must ensure that:

- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
- (b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;
 and
- (c) all water samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being tested.

4. The licence holder must ensure that:

- (a) quarterly monitoring is undertaken such that there are at least 45 days in between the days on which samples are taken;
- (b) 6-monthly monitoring is undertaken such that there are at least 5 months in between the days on which samples are taken; and
- (c) annual monitoring is undertaken such that there are at least 9 months in between the days on which samples are taken.

Record-keeping

- **5.** 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 maintenance of infrastructure required to ensure that it is kept in good working order in accordance with condition 1;
 - (c) monitoring undertaken in accordance with condition 2; and
 - (d) complaints received under condition 6.

In addition, the books must:

- (e) be legible;
- (f) if amended, be amended in such a way that the original and subsequent amendments remain legible and are capable of retrieval;
- (g) be retained for at least 3 years from the date the books were made; and
- (h) be available to be produced to an Inspector or the CEO.
- 6. The licence holder must record the number and details of any complaints received by the licence holder relating to its obligations under this licence and its compliance with Part V of the EP Act at the premises, and any action taken by the licence Holder in response to the complaint. Details of complaints must include:
 - (a) an accurate record of the concerns or issues raised, for example a copy of any written complaint or a written note of any verbal complaints made;
 - (b) the name and contact details of the complainant, if provided by the complainant;
 - (c) the date of the complaint; and
 - (d) the details and dates of the actions taken by the licence holder in response to the complaints.

Reporting

- **7.** 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 30 September in each year, an Annual Audit Compliance Report in the approved form.
- 8. The licence holder must submit to the CEO by no later than 30 September in each year, an annual environmental report for the previous annual period for the conditions listed in Table 3, and which provides information in accordance with the corresponding requirement set out in that table.

Table 3: Annual environmental report requirements

Condition(s)	Requirement
2	Ambient groundwater quality monitoring - Tabulated groundwater monitoring data results and an interpretation of monitoring data results including comparison of historical data to determine trends

Definitions

In this Licence, the terms in Table 1 have the meanings defined.

Table 1: Definitions

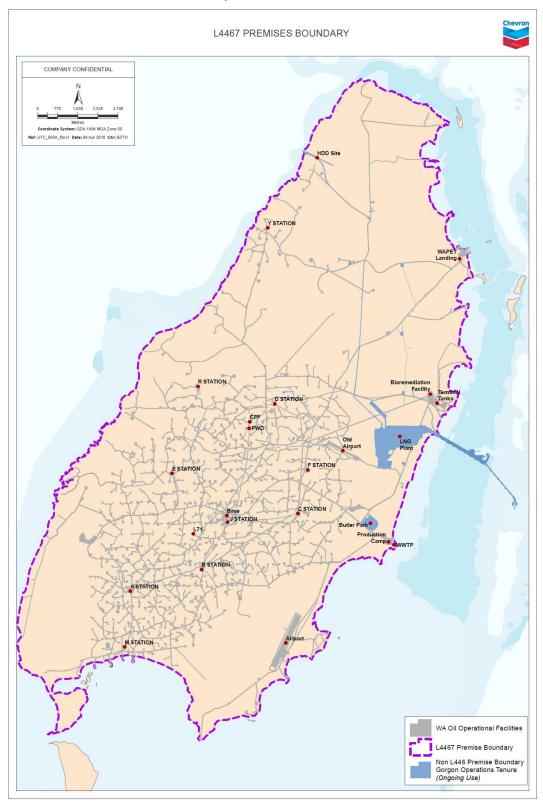
Term	Definition
ACN	Australian Company Number
Annual Audit Compliance Report	means a report in a format approved by the CEO as presented by the licence holder or as specified by the CEO (guidelines and templates may be available on the Department's website).
Annual Period	means a 12 month period commencing from 1 July until 30 June in the following year.
Approved form	The AACR form template approved by the CEO for use and available via DWER's external website
ARI	Average Recurrence Interval
AS 1940:2017	means the Australian Standard 1940:2017: The storage and handling of flammable and combustible materials
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/New Zealand Standard for Water quality – Sampling Part 11: Guidance on sampling of groundwaters
Averaging period	means the time over which a limit is measured or a monitoring result is obtained
Books	has the same meaning given to that term under the EP Act.
ВТЕХ	means the suite of aromatic hydrocarbons that typify petroleum products and comprises Benzene, Toluene (methyl benzene), Ethyl benzene and the Xylenes (ortho-, meta-, and para-dimethyl benzene)
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the Environmental Protection Act 1986 Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Licence Holder in writing and sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to: (a) compliance with the EP Act or this Licence; (b) the Books or other sources of information maintained in accordance with this Licence; or (c) the Books or other sources of information relating to Emissions from the Premises.
Discharge	has the same meaning given to that term under the EP Act.

DWER Department of Water and Environmental Regulation. Emission has the same meaning given to that term under the EP Act. EP Act means the Environmental Protection Act 1986 (WA). EP Regulations means the Environmental Protection Regulations 1987 (WA). Implementation Agreement or Decision has the same meaning given to that term under the EP Act. Licence means an inspector appointed by the CEO in accordance with s.88 of the EP Act. Licence refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the Conditions. Licence Holder refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence. NATA means the National Association of Testing Authorities, Australia PAH Polycyclic Aromatic Hydrocarbons PSH Phase Separated Hydrocarbons Pollution has the same meaning given to that term under the EP Act. Premises refers to the premises to which this Licence applies, as specified at the front of this Licence and as shown on the map in Schedule 1 to this Licence. Primary Activities has the same meaning given to that term under the EP Act. Primary Activities refers to the Prescribed Premises activities listed on the front of this Lice		
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TRH Total Recoverable Hydrocarbons	Primary Activities	
•	Quarterly	means once in every three months
Waste has the same meaning given to that term under the EP Act.	TRH	Total Recoverable Hydrocarbons
	Waste	has the same meaning given to that term under the EP Act.

Schedule 1: Maps

Premises map

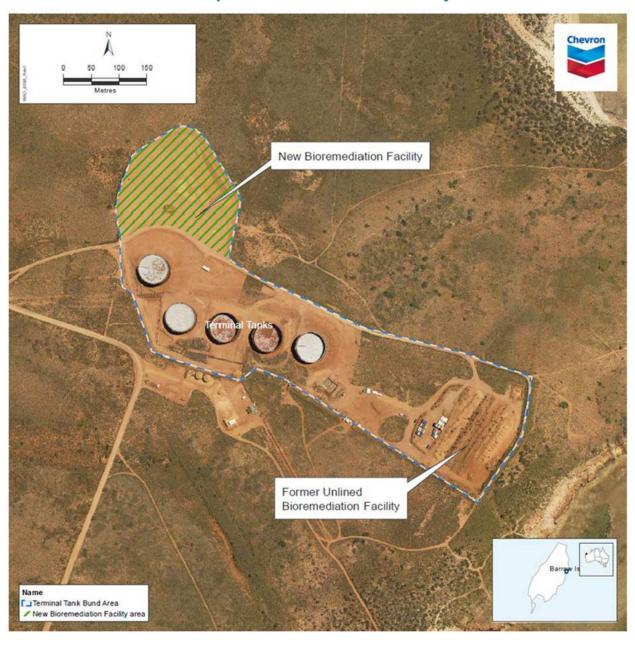
The Premises is shown in the map below.



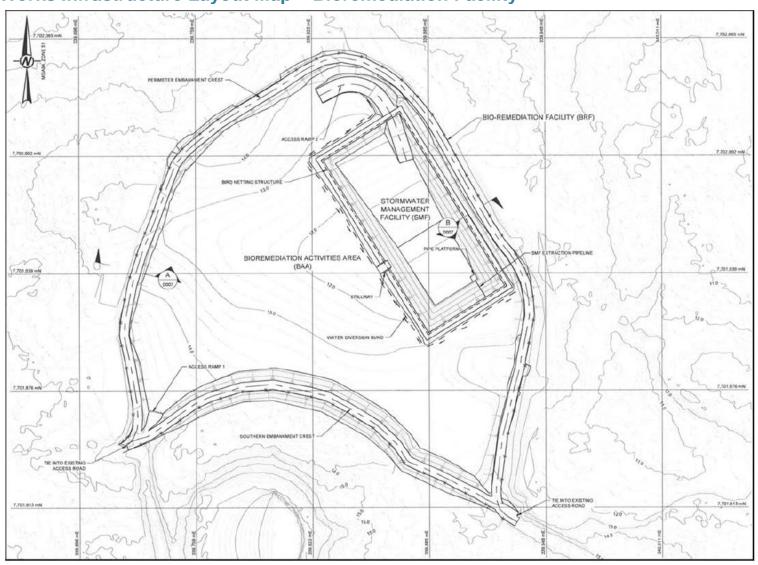
Works Infrastructure Map – Used Tyre Storage locations



Works Infrastructure Map – Bioremediation Facility location



Works Infrastructure Layout Map – Bioremediation Facility



Monitoring locations

Terminal Tanks, Terminal Tank Stormwater Receiver Monitoring Wells



Monitoring locations

Bioremediation Facility – monitoring well locations

