Government of Western Australia
Department of Water and Environmental Regulation

Revised Licence

Licence number	L8159/2004/2
Licence holder	EDL LNG (WA) Pty Ltd
ACN	064 437 789
Registered business address	Level 6, 1 Eagle Street Brisbane QLD 4000
DWER file number	DER2014/001067
Duration	13/07/2012 to 12/07/2027
Date of amendment	10/06/2021
Premises details	Maitland LNG Facility North West Coastal Highway MAITLAND WA 6714 Legal description – Part of Lot 3002 on Plan 42721 As defined by the coordinates in Schedule 1

Prescribed premises category description (Schedule 1, Environmental Protection Regulations 1987)	Assessed production capacity
Category 34: Oil or gas refining: premises on which crude oil, condensate or gas is refined or processed.	73,000 tonnes per annual period

This amended licence is granted to the licence holder, subject to the attached conditions, on 10/06/2021, by:

Caron Goodbourn

Digitally signed by Caron Goodbourn
Date: 2021.06.10 15:32:56 +08'00'

MANAGER, PROCESS INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Ref number	Summary of changes
12/07/2007	L8159/2004/1	Licence granted (five year term).
5/07/2012	L8159/2004/2	Licence reviewed and reissued for five years.
29/04/2016	L8159/2004/2	A CEO initiated amendment notice was issued which extended licence expiry dates for almost all licensed prescribed premises. The licence expiry date was extended via this notice to 12 July 2022.
14/05/2020	L8159/2004/2	Licence amended to include operation of an additional gas turbine. In conjunction with the Licence Holder's amendment application, the CEO initiated an amendment to the type and style of licence and consolidation of separately issued instruments relating to L8159/2004/2.
10/06/2021	L8159/2004/2	Licence amended to change stormwater management controls and surface water monitoring requirements and extend licence expiry date to 12 July 2027.

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 ensure the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in that table.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location Schedule 1: Site layout and map of discharge points
Drains tank	The tanks must be located within a low permeability (1 x10^{-9} m/s) compound which is maintained to contain not less than 110% of the volume of the largest storage vessel or interconnected system and at least 25% of the total volume of substances stored in the compound. The compound described above must: • be graded or include a sump to allow recovery of liquid; • be chemically resistance to the substances stored; • include valves, pumps and meters associated with transfer operations wherever practical, or the equipment shall be adequately protected and contained in an areas designed to permit recovery of liquids released following accidents or vandalism; • be designed such that jetting from any storage vessel or fitting will be captured within the compound; and • be maintained such that the capacity of the bund is maintained at all times.	43
Amine tank		16
TEG tank		42
Stormwater collection sump and stormwater drains	Stormwater drains must be kept clear of waste to allow for their effective use. Potentially contaminated stormwater must be diverted into a sump. Water must be tested and verified as compliant with licence condition limit (Table 3) before discharge.	Not shown (stormwater drains) 33 (LNG stormwater collection sump)

Emissions and discharges

Authorised discharge points

2. The licence holder must ensure that all emissions of the type listed in Table 2 are discharged only from the corresponding discharge point and only at the corresponding discharge point location set out in Table 2.

Table 2: Authorised discharge points

Emission	Discharge point	Discharge point height (m AGL)	Discharge point location Schedule 1: Site layout and discharge points map
NOx SOx	Gas Turbine Generator 1 (GT1)	10	28
	Gas Turbine Generator 2 (GT2)	10	28

Emission	Discharge point	Discharge point height (m AGL)	Discharge point location Schedule 1: Site layout and discharge points map
CO VOCs PM	Gas Turbine Generator 3 (GT3)	10	28
	Gas Engine 1 (GE 1)	5	48
	Flare	16	31
	TEG Heater	6	14
	Black start generator	5	29
Stormwater which meets the discharge limit specified in Table 3	Bunds, sumps and drains	N/A	9 – De-ethaniser column skid
			10 – Amine contractor vessel
			13 – Amine plant skid
			14 – TEG heater skid
			16 – Amine tank
			33 – LNG stormwater collection sump
			42 – TEG tank
			49 – Transformer
			53 – Drains tank
			54 – Demineralised water tank
			55 - Transformer

Discharge limits

3. The licence holder must ensure that emissions from the discharge point listed in Table 3 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 5.

Table 3: Emission and discharge limits

Discharge point Schedule 1: Site layout and discharge points map	Parameter	Limit (including units)	Averaging period
9, 10, 13, 14, 16, 33, 42, 49, 53, 54, 55	TRH	15 mg/L	Spot sample

Specified actions

4. The licence holder shall immediately remove and dispose of any liquid resulting from spills or leaks of chemicals including fuel, oil or other hydrocarbons, whether inside or outside low permeability compound(s), to a facility that is licensed to accept such waste.

Monitoring

5. The licence holder must monitor emissions:

(a) from each discharge point;
(b) at the corresponding monitoring location;
(c) for the corresponding parameter;
(d) at the corresponding frequency;
(e) for the corresponding averaging period;

(f) in the corresponding unit; and
(g) using the corresponding method,

as set out in Table 4.

Table 4: Monitoring of discharges

Discharge point and monitoring location Schedule 1: Site layout and discharge points map	Parameter	Frequency	Averaging period	Unit	Method		Reportable event criteria
					Sampling	Analysis	
GT 1 to GT3 and GE 4	Volumetric flow rate	Each annual period (if operating)[1]	Minimum 30 minutes	m^3/s[2, 3]	USEPA Method 2 (NATA accredited)[4, 5]		NA
	NO_x			mg/m^3 and g/sec[2, 3]	USEPA Method 7D or 7E (NATA accredited)[4, 5]		
31 (Flare)	Dark Smoke Emissions	During flaring events where a shade greater than Ringelmann 1 is emitted for a continuous period of 30 minutes or more in any 24 hours period	Test specific	Ringelmann number	Ringelmann Method	NA	Ringelmann shade of 3 or greater emitted for a continuous period of 30 minutes of more
9, 10, 13, 14, 16, 33, 42, 49, 53, 54, 55	TRH	Prior to each discharge of water to the environment.	Spot sample	mg/L	Water must be tested with hydrocarbon detection strips		NA

Note 1: Monitoring must be completed for a minimum of two gas turbines each annual period. Any turbines in operation at the time of the monitoring event must be monitored.
Note 2: Units are referenced to STP dry.
Note 3: Concentration units for all gases are referenced to 15% O_2
Note 4: Monitoring shall be undertaken to reflect Normal Operating Conditions
Note 5: Where any USEPA method refers to USEPA Method 1 for the sampling plane, this must be read as a referral to AS 4323.1

6. The licence holder must ensure that 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.

Records and reporting

7. 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) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;
(c) monitoring programmes undertaken in accordance with condition 5 of this licence; and
(d) reportable events reported in accordance with condition 9 of this licence.

8. The books specified under condition 7 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;
(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.

Notification

9. Within 24 hours of an exceedance of the Reportable Event criteria having occurred, specified in Table 4, the licence holder must notify the CEO in writing of the following:

(a) the date, time and duration of the exceedance;
(b) the raw monitoring data for the duration of the exceedance in tabulated form;
(c) a description of conditions or activities occurring on the premises which may have contributed the exceedance; and
(d) actions taken to minimise the duration of the exceedance.

Annual Audit Compliance Report

10. The licence holder must:

(a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
(b) and submit to the CEO by no later than 31 August each year an Annual Audit Compliance Report in the approved form.

Annual Environmental Report

11. The licence holder must submit to the CEO by no later 31 August each year, an Annual Environmental Report for the previous 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 requirements

Condition	Requirement
5 - Monitoring of discharges	Tabulated monitoring data results for each monitoring location showing concentrations of all parameters over a minimum three year period (where sufficient data allows). An assessment of the monitoring data results contained within the report against the previous monitoring periods and Licence limits. Copies of original monitoring, laboratory and analysis reports submitted by third parties.

Definitions

In this licence, the terms in Table 6 have the meanings defined.

Table 6: Definitions

Term	Definition
ACN	Australian Company Number
AGL	means above ground level
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 1 July until 30 June of the immediately following year.
approved form	The AACR Form templated approved by the CEO for use and available via the Department's external website
AS 1940	means the most recent version of the Australian Standard *AS 1940 The storage and handling of flammable and combustible liquids*
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 5667.10	means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance on the sampling of waste waters*
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 *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
CO	means carbon monoxide
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (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	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
mg/m^3	means (in relation to a gaseous discharge) milligrams per cubic metre corrected to dry gas (i.e. removal of all volume occupied by water vapour and droplets) and corrected to STP
g/sec	means grams per second, the mass emission rate in exhaust stack gases and effluents
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.
mg/L	means milligrams per litre, the concentration of an aqueous solution and is the ratio of the mass of specific solute to the volume of solution (not solvent)

Term	Definition
NATA	means the National Association of Testing Authorities, Australia
NOx	means (when used in relation to waste gases discharged to atmosphere) the sum of all oxides of nitrogen but reported as equivalent nitrogen dioxide (NO_2)
PM	means particulate matter
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 in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Reportable Event	means an exceedance to criteria specified requiring certain actions to be undertaken by the licence holder including but not limited to reporting to the CEO.
Ringelmann Number	means the numbers of the shades referred to in the most recent version of *British standard: 2742 – Use of the Ringelmann and miniature smoke charts*
SO_x	means oxides of sulfur
STP	means standard temperature and pressure which is a temperature of 0°C and an absolute pressure of 101.325 kilopascals
TEG	means tri ethylene glycol
TRH	means total recoverable hydrocarbons
USEPA Method 2	means USEPA Method 2 *Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)*
USEPA Method 7D	means USEPA Method 7D *Determination of Nitrogen Oxide Emissions from Stationary Sources (Alkaline-Permanganate/Ion Chromatographic Method*
USEPA Method 7E	means USEPA Method 7E *Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)*
VOCs	means volatile organic compounds
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 red in the map below.

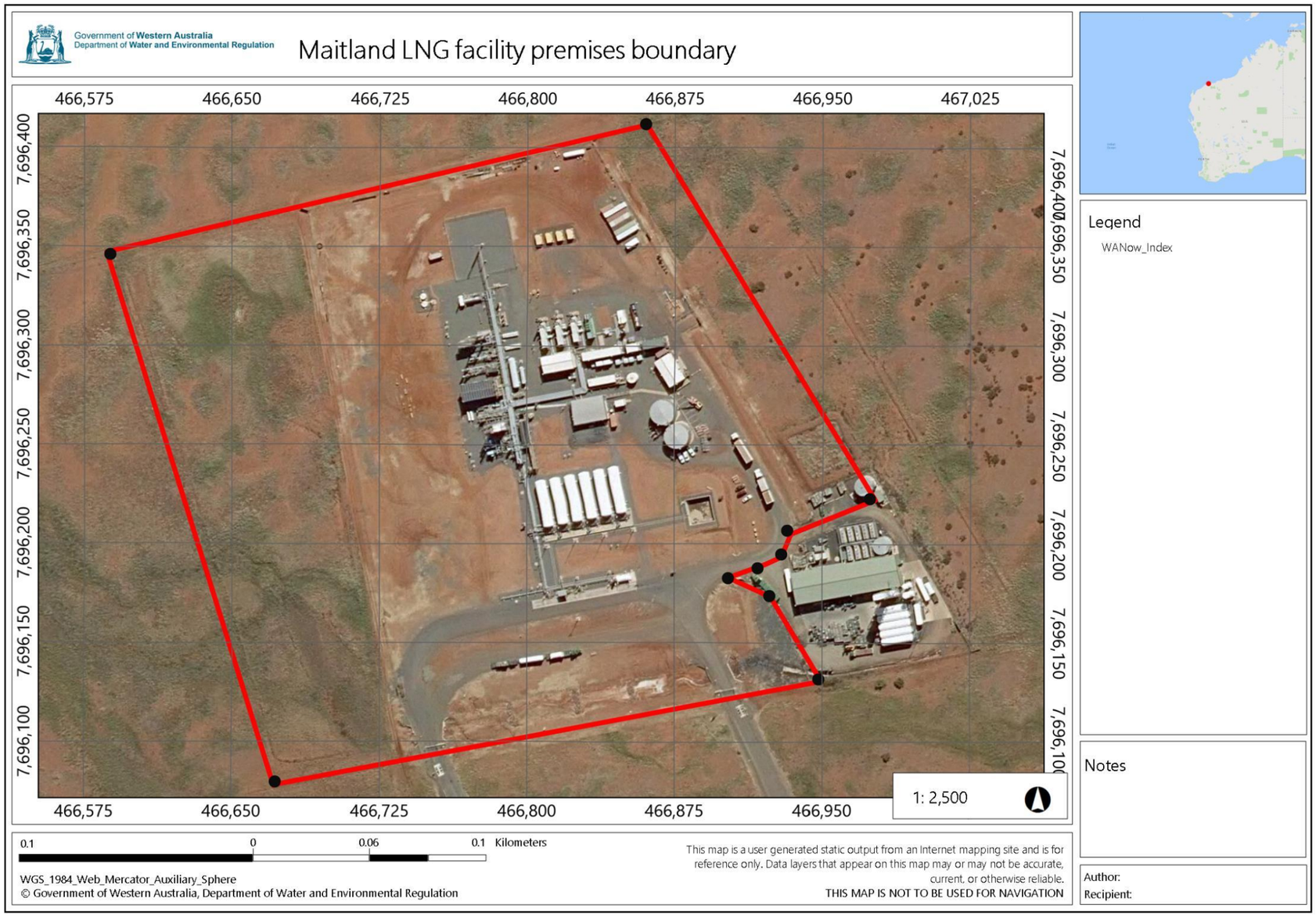

Figure 1: Map of the boundary of the prescribed premises

Site layout and discharge points map

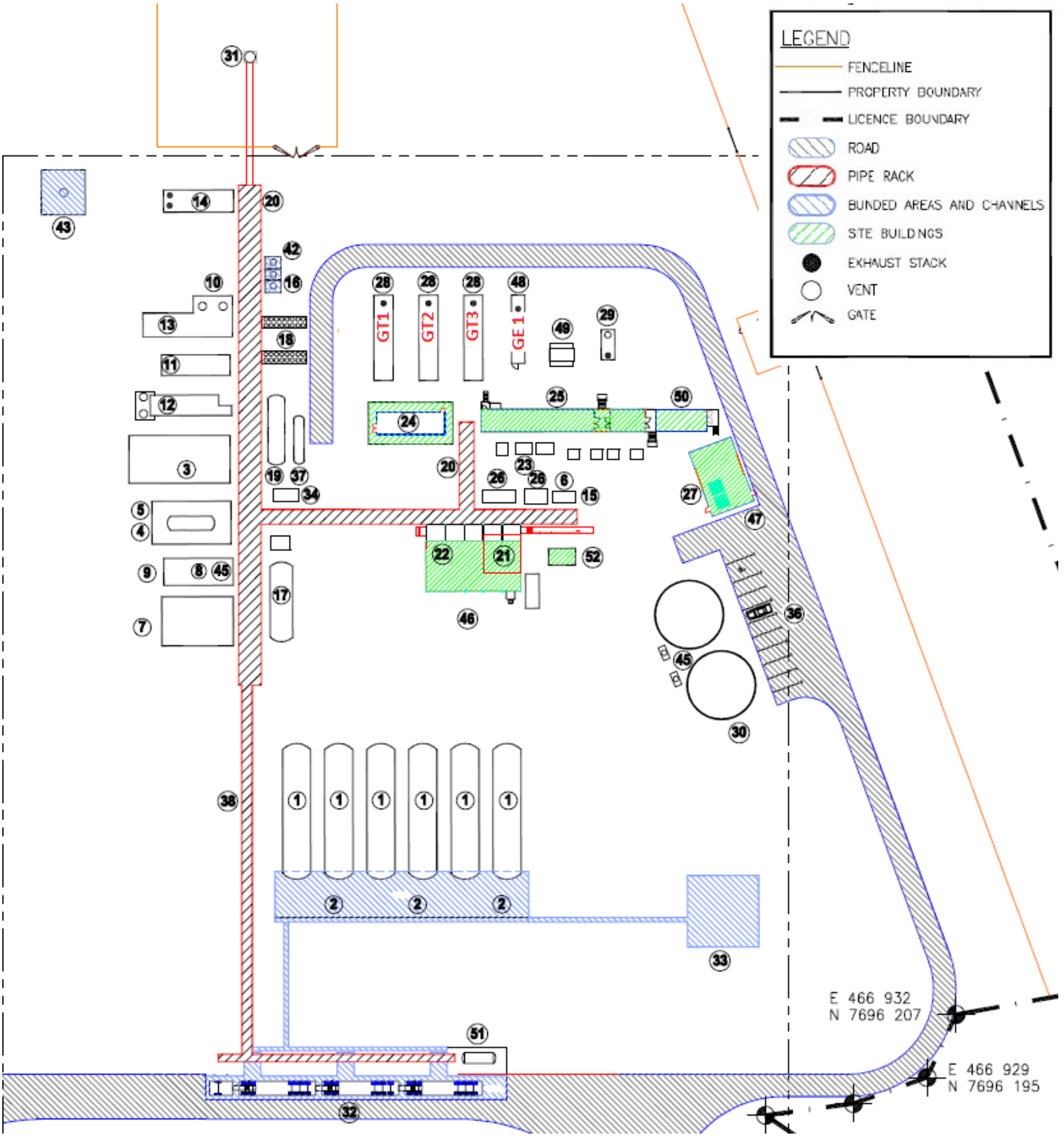

Figure 2: Map of the premises infrastructure and discharge/monitoring points

Premises boundary

The premises boundary is defined by the coordinates in Table 7.

Table 7: Premises boundary coordinates (GDA94)

Easting	Northing	Zone
466860	7696412	50
466948	7696132	50
466917	7696188	50
466974	7696223	50
466588	7696346	50
466923	7696174	50
466929	7696195	50
466672	7696080	50
466902	7696183	50
466932	7696207	50