Government of Western Australia
Department of Water and Environmental Regulation

Amended Licence

Licence number	L9102/2017/1
Licence holder	Chevron Australia Pty Ltd
ACN	086 197 757
Registered business address	250 St Georges Terrace, PERTH WA 6000
DWER file number	DER2017/001839
Duration	30 July 2018 to 29 July 2028
Date of issue	30 July 2018
Date of amendment	24 February 2025
Premises details	Gorgon LNG Project Legal description - Part of Crown Lease L077431, Certificate of Title Volume LR3168 Folio 315, Site 1 on Deposited Plan 409277; Part of Crown Lease L077428, Certificate of Title LR3158 Folio476, Site 5 on Deposited Plan 64220; Temporary Wastewater Injection Facilities Licence LIC00554/2009_1_43; Part of Revised Service Corridor Easement L641372, Certificate of Title Volume LR3142 Folio 58, Deposited Plan 91514; Part of Construction & Operations Support Infrastructure Licence 00058/2014_A4735851; Permanent Water Disposal Wells Licence L00016_2012/1_A1991085; Part of Road Infrastructure Licence Lic 00565/2009_1_31; CO2 Injection System Pipeline Easement L819294; Part of CO2 Injection Wells System Licence LIC_00564_2009_A1744377; and Support Infrastructure Licence (Old Airport East) 00333-2016_A6042022 BARROW ISLAND WA 6712 As defined by the premises boundary map in Schedule 1 and coordinates in DWER document: DWERDT940930

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production / design capacity**
Category 10: Oil or gas production from wells	LNG: 18 million tonnes per annual period DomGas: 300 TJ/day Condensate: 1 million tonnes per annual period
Category 34: Oil or gas refining	
Category 52: Electrical power generation	584.5 MW

Prescribed premises category description **(Schedule 1, *Environmental Protection Regulations 1987*)**	**Assessed production / design capacity**
Category 54: Sewage facility	1,768 m^3/day
Category 61: Liquid waste facility	750,000 tonnes per annual period
Category 61A: Solid waste facility	Waste concrete storage area: 240,000 tonnes of concrete waste per annual period Waste transfer station: 111,840 tonnes of other solid waste per annual period
Category 73: Bulk storage of chemicals etc	1,090 m^3
Category 77: Concrete batching or cement products manufacturing	75,000 tonnes per annual period

This amended licence is granted to the licence holder, subject to the attached conditions, on 24 February 2025, by:

Amine Fisher

Digitally signed by Amine Fisher
Date: 2025.02.24 09:38:51 +08'00'

Amine Fisher
Manager, Process Industries
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
30/07/2018	L9102/2017/1	Licence granted.
30/07/2019	L9102/2017/1	Licence amended to allow for operation of reservoir carbon dioxide infrastructure and extend the premises boundary to include the infrastructure.
21/12/2020	L9102/2017/1	Licence amended to give effect to a decision of the Minister under the *Environmental Protection Act 1986*.
30/08/2021	L9102/2017/1	Licence amended to include Categories 61, 77 and replace 62 with 61A as well as include operation of the permanent wastewater treatment plant.
25/07/2024	L9102/2017/1	Licence amended to authorise the disposal of well remediation chemicals at the PWD and TWIP disposal wells for remediation activities and to amend the premises boundary.
24/02/2025	L9102/2017/1	CEO initiated licence amendment to manage the presence of PFAS compounds within the premises.

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.

Definitions

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

Table 1: Definitions

Term	Definition
Acid treatment chemicals	means; dispersants, solvents, stabilisers, surfactants, acid precursors, acid pre-flush, acids, corrosion inhibitors, nitrogen and other chemicals of a similar nature.
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 of the immediately following year.
Assessment of Site Contamination NEPM	means the *National Environment Protection (Assessment of Site Contamination) Measure 1999*, as amended from time to time.
AS 4323.1	means the Australian Standard AS4323.1 *Stationary Source Emissions Method 1: Selection of sampling positions*
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 5667.10 *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 groundwaters*
Averaging Period	means the time over which a limit is measured or a monitoring result is obtained
Barrow Island Act Section 13 Approval	means the Barrow Island Act 2003 (WA) – Section 13 Approval to Disposal of Carbon Dioxide by Injection Into Subsurface Formation, inclusive of approved variations
Books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Clay stabilisation chemicals	means; clay stabiliser, clay protection, oxygen scavenger chemicals, biocide, magnesium oxide, nitrogen, surfactants, friction reducers and other chemicals of a similar nature.

Term	Definition
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.
Continuous	means operates with an availability greater than 90 per cent on a calendar monthly basis.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.
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.
enclosed vessel	means a container or tank with impermeable base and sides and a cover which prevents water ingress
Environmental Harm	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).
Freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point
Hazardous Waste	has the meaning defined in the Landfill Definitions.
Implementation Agreement or Decision	has the same meaning given to that term under the EP Act.
Inert Waste Type 1	has the meaning defined in the Landfill Definitions.
Inert Waste Type 2	has the meaning defined in the Landfill Definitions.
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
ISO 6974	means the International Standards Organisation ISO 6974 *Natural gas - Determination of composition with defined uncertainty by gas chromatography Parts 1-6*
ISO 10715:1997	means the International Standards Organisation ISO 10715: 1997 *Natural gas - Sampling guidelines*
ISO 19739:2004	means the International Standards Organisation ISO 19739:2004 *Natural gas - Determination of sulfur compounds using gas chromatography*
Landfill Definitions	means the document titled 'Landfill Waste Classification and Waste Definitions 1996' published by the Chief Executive Officer of the Department of Water and Environmental Regulation as amended from time to time.

Term	Definition
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.
LOR	means limit of reporting
m AGL	metres above ground level
m^3/day	cubic metres per day
MMscF/d	million standard cubic feet per day
Material Environmental Harm	has the same meaning given to that term under the EP Act.
mole	as defined in the International System of Units
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 Startup, Shutdown and Upset Conditions
NO_x	means oxides of nitrogen, calculated as the sum of nitric oxide and nitrogen dioxide and expressed as nitrogen dioxide
PFAS	means per- and poly-fluoroalkyl substances
PFAS NEMP	means the PFAS National Environmental Management Plan as amended from time to time
Pollution	has the same meaning given to that term under the EP Act.
ppmv	parts per million volume
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.
Prescribed Premises	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 Licence as described in Schedule 2, at the locations shown in Schedule 1.
PWD	means Permanent Wastewater Disposal
Quarterly	means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October to 31 December in the same year

Term	Definition
Soil or fill movement	means any deliberate or mechanical activity involving the excavation and subsequent relocation or deposition, of soil or fill including activities such as excavation for construction, the creation of stockpiles and filling of excavations and excludes natural soil movements, ground scaping/grading and movement of soil within the immediate / adjacent location of an excavation.
Serious Environmental Harm	has the same meaning given to that term under the EP Act.
Shutdown	means the period when plant or equipment is brought from normal operating conditions to inactivity
Special Waste Type 1	has the meaning defined in the Landfill Definitions
Special Waste Type 3	has the meaning defined in the Landfill Definitions
Startup	means the period when plant or equipment is brought from inactivity to normal operating conditions
Standard suite of PFAS compounds	means all compounds listed in Table 15
STP dry	means standard temperature and pressure (0^{o} Celsius and 101.325 kilopascals respectively), dry
TWIP	means Temporary Wastewater Injection Plant
Ultra trace analysis	means analytical procedure capable of achieving the limit of reporting as specified for each PFAS compound as per Table 15 for water and soil samples.
Unreasonable Emission	has the same meaning given to that term under the EP Act.
Upset Conditions	means any sudden, unavoidable and/or unintended failure of equipment or process to operate in a normal or usual manner
USEPA	means United States [of America] Environmental Protection Agency
Waste	has the same meaning given to that term under the EP Act.
Wastewater	means liquid wastes originating as stormwater or associated with the Primary Activities
WWTP	means wastewater treatment plant

Licence conditions

The Licence Holder must ensure that the following conditions are complied with:

Infrastructure and equipment

1. The licence holder must ensure that the infrastructure and equipment specified in Table 2 and located at the corresponding infrastructure location is maintained in good working order and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment controls table

Site infrastructure and equipment	**Operational requirements**	**Infrastructure location** **Schedule 1: Site layout map**
Stormwater Holding Pond	Operated with a minimum freeboard of 600 mm Pond must be maintained with a hydraulic conductivity (permeability) of $1x10^{-9}$ m/s or less Pond must be operated with a leak detection system connected to a visual and audible alarm	47
Oily Water Sump	Operated with a minimum freeboard of 600 mm Sump must be maintained with a hydraulic conductivity (permeability) of $1x10^{-9}$ m/s or less Sump must be operated with a leak detection system connected to a visual and audible alarm	
Waste Transfer Station	Hazardous wastes (including Special Waste Type 3) must be stored within enclosed vessels and clearly labelled Stormwater collected within the Waste Transfer Station must not be discharged into the premises stormwater drainage system.	27-34
Bridging WWTP	An alarm system must be maintained that activates in the event of: (i) high tanks levels; and (ii) tank overflows.	19-22
Permanent WWTP		23
Liquid waste facility		24
Concrete batching plant settlement pond	Operated with a minimum freeboard of 300 mm	42A
PWD wells	Operated with a high pressure alarm for the A annulus pressure	25

Discharges to air

2. 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 set out in Table 3.

Table 3: Authorised discharge points to air

Emission	Discharge point	Discharge point height (m AGL)	Discharge point location Schedule 1: Map of discharge points to air and monitoring locations/ Map of reservoir CO_2 discharge and monitoring points
NOx SOx CO VOC PM	Frame 9 Gas Turbine Generator 1 (GTG 1)	45	Discharge point A1
	Frame 9 Gas Turbine Generator 2 (GTG 2)	45	Discharge point A2
	Frame 9 Gas Turbine Generator 3 (GTG 3)	45	Discharge point A3
	Frame 9 Gas Turbine Generator 4 (GTG 4)	45	Discharge point A12
	Frame 9 Gas Turbine Generator 5 (GTG 5)	45	Discharge point A13
	LNG Train 1 Frame 7 Gas Turbine 1 (GT1) (low pressure mixed refrigerant compressor)	45	Discharge point A4
	LNG Train 1 Frame 7 Gas Turbine 1 (GT1) (high pressure mixed refrigerant / propane refrigerant compressor)	45	Discharge point A5
	LNG Train 2 Frame 7 Gas Turbine 2 (GT2) (low pressure mixed refrigerant compressor)	45	Discharge point A14
	LNG Train 2 Frame 7 Gas Turbine 2 (GT2) (high pressure mixed refrigerant / propane refrigerant compressor)	45	Discharge point A15
	LNG Train 3 Frame 7 Gas Turbine 3 (GT3) (low pressure mixed refrigerant compressor)	45	Discharge point A16
	LNG Train 3 Frame 7 Gas Turbine 3 (GT3) (high pressure mixed refrigerant / propane refrigerant compressor)	45	Discharge point A17
	Heating Medium Heater A	50	Discharge point A6

Emission	Discharge point	Discharge point height (m AGL)	Discharge point location Schedule 1: Map of discharge points to air and monitoring locations/ Map of reservoir CO_2 discharge and monitoring points
	Heating Medium Heater B	50	Discharge point A7
	Wet and Dry Gas Ground Flare	2	Discharge point A8
VOC	Boil Off Gas Flare A	25	Discharge point A9A
	Boil Off Gas Flare B	25	Discharge point A9B
BTEX H_2S Hg	Train 1 Acid Gas Removal Unit (AGRU1)	56	Discharge point A10
	Train 2 Acid Gas Removal Unit (AGRU2)	56	Discharge point A18
	Train 3 Acid Gas Removal Unit (AGRU3)	56	Discharge point A19
	MEG Flash Gas Compressor	40	Discharge point A11
Hydrocarbon (including BTEX) H_2S	Vent Group 1 – Low Pressure Reservoir CO_2 compression system	56	Vent 1A, Vent 1B, Vent 1C
	Vent Group 2 – High Pressure Reservoir CO_2 compression system	37.5	Vent 2A (11 vents) Vent 2B (11 vents) Vent 2C (11 vents) Vent 2D (11 vents) Vent 2E (11 vents) Vent 2F (11 vents)
	Vent Group 3 – Reservoir CO_2 Pipeline Pig Receiver/Launcher	21.7	Vent 3A
		12.5	Vent 3B
		22.7	Vent 3C
	Vent Group 4 – Reservoir CO_2 Injection Wells	13.5	Vent 4A (2 vents), Vent 4B (4 vents) Vent 4C (3 vents)
	Vent Group 5 – Reservoir CO_2 Injection System Thermal Safety Vents	28.6	Vent 5A (2 vents) Vent 5B (2 vents) Vent 5C (2 vents)
		0	Vent 5D Vent 5E (2 vents) Vent 5F (4 vents)

Emission	Discharge point	Discharge point height (m AGL)	Discharge point location Schedule 1: Map of discharge points to air and monitoring locations/ Map of reservoir CO_2 discharge and monitoring points
			Vent 5G (4 vents)
		23.3	Vent 5H, Vent 5I, Vent 5J
Nitrogen gas Hydrocarbon gas	TWIP wells	N/A	Discharge Point A20 Discharge Point A21
	PWD wells		Discharge Point A22 Discharge Point A23

Monitoring of discharges to air

3. 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 13 in Schedule 3.

4. The licence holder must ensure that quarterly monitoring is undertaken such that there are at least 45 days in between the days on which samples are taken.

5. The licence holder must ensure that sampling required by condition 3 is undertaken at sampling locations in accordance with the current version of AS 4323.1.

6. The licence holder must ensure that all non-continuous sampling and analysis undertaken required by condition 3 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

Discharges 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 set out in Table 4.

Table 4: Authorised discharges to land

Emission	Discharge point	Discharge point location Schedule 1: Map of discharge points to land and monitoring locations/ Map of reservoir CO_2 discharge and monitoring points
Potentially contaminated stormwater	Stormwater Holding Pond	Discharge point L1
Wastewater Well remediation chemicals[1]: • Clay stabilisation chemicals • Acid treatment chemicals • Nitrogen • Brine Fluid	PWD Wells	Z-WI1 discharge point
		Z-WI2 discharge point
	TWIP Disposal Wells	WDW1
		WDW2
CO_2 Hydrocarbon (including BTEX) H_2S Nitrogen Water Corrosion inhibitor Monoethylene glycol	Drill Centre A - Injection Well A (A-I1)	Drill Centre A Injection Wells
	Drill Centre A - Injection Well B (A-I2)	
	Drill Centre B - Injection Well A (B-I3)	Drill Centre B - Injection Wells
	Drill Centre B - Injection Well B (B-I4)	
	Drill Centre B - Injection Well C (B-I5)	
	Drill Centre B - Injection Well D (B-I6)	
	Drill Centre C - Injection Well A (C-I7)	Drill Centre C - Injection Wells
	Drill Centre C - Injection Well B (C-I8)	
	Drill Centre C - Injection Well C (C-19-ST1)	

Note 1: Only applies to discharge into injection wells when associated with well remediation works

Emission limits

8. The licence holder must ensure that emissions from the discharge point listed in Table 5 for the corresponding parameter do not exceed the corresponding limit (units specified) when monitored in accordance with condition 9.

Table 5: Discharge to land limits

Discharge point	Parameter	Limit[1]
Stormwater Holding Pond	Total recoverable hydrocarbons	10 mg/L
	pH	6 – 9

Discharge point	Parameter	Limit[1]
	Total suspended solids	500 mg/L
	Electrical conductivity	18,000 µS/cm
	Standard suite of PFAS compounds	As specified in column LOR (water) for each compound specified in Table 15
Drill Centre A - Injection Wells A-B Drill Centre B - Injection Wells A-D Drill Centre C - Injection Wells A-C	Hydrocarbon (including BTEX)	(i) subject to (ii), 3% (mole) hydrocarbon (ii) 10% (mole) hydrocarbon during upset or non-routine conditions[2] providing the occurrence of such conditions does not result in the total CO_2 injection volume during any 12 month period containing >3.3% (mole) hydrocarbon
Drill Centre A - Injection Wells A-B Drill Centre B - Injection Wells A-D Drill Centre C - Injection Wells A-C	H_2S	400 ppmv
Drill Centre A - Injection Wells A-B Drill Centre B - Injection Wells A-D Drill Centre C - Injection Wells A-C	Total daily injection rate (sum of all injection wells)	9.9 million m^3/day (350 MMscF/d)
Drill Centre A - Injection Wells A-B Drill Centre B - Injection Wells A-D Drill Centre C - Injection Wells A-C	Annual average daily injection rate (sum of all injection wells)	9.2 million m^3/day (325 MMscF/d)

Note 1: Discharge to land limits at the Drill Centre Injection Wells have been extracted from the *Barrow Island Act Section 13 Approval* (and variation of conditions dated 7 March 2019). These emission limits have been set to ensure L9102/2017/1 does not authorise emissions which are additional to, or of a higher degree of regulatory control than the *Barrow Island Act Section 13 Approval*

Note 2: As per the *Barrow Island Act Section 13 Approval* (variation of conditions dated 7 March 2019), upset or non-routine conditions means transient abnormal conditions (for example, temporary interruption or reduction in gas production due to field or plant trip or the requirement for field feed balancing).

Monitoring of discharges to land

9. 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 14 in Schedule 3.

Waste acceptance, handling and disposal

Waste management

10. The licence holder must manage waste at the Waste Transfer Station which does not exceed the corresponding rate, and which meets the corresponding specification set out in Table 6.

Table 6: Waste management

Waste	Rate	Specification
Inert Waste Type 1	3,000 tonnes per month	Handling, consolidation and sorting, and storage
Inert Waste Type 2	120 tonnes per month	Handling, consolidation and sorting, and storage at the Waste Transfer Station (Schedule 1: Premises map)
Putrescible Waste	2,400 tonnes per month	
Special Waste Type 1	3,800 tonnes per month	Handling, consolidation and sorting, and storage at the Waste Transfer Station (Schedule 1: Premises map).
Solid hazardous waste		
Liquid hazardous waste		Handling, consolidation and sorting, and storage within a bunded area at the Waste Transfer Station (Schedule 1: Premises map)
Special Waste Type 3		

General Note: Additional requirements for the acceptance of controlled Waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

Waste monitoring

11. The licence holder must record the total amount of waste received at the Waste Transfer Station for each waste type listed in Table 7 in the corresponding unit, and for each corresponding time period, as set out in Table 7.

Table 7: Waste receival monitoring

Waste type	Unit	Time period
Inert Waste Type 1	Tonnes	Every month
Inert Waste Type 2		
Putrescible Waste		
Special Waste Type 1		
Special Waste Type 3		

Solid hazardous waste		
Liquid hazardous waste		

12. The licence holder must record the total amount of waste removed from the Waste Transfer Station for each waste type listed in Table 8 and in the corresponding unit and for each corresponding time period set out in Table 8.

Table 8: Waste removal monitoring

Waste type	Unit	Time period
Inert Waste Type 1	Tonnes	Every month
Inert Waste Type 2		
Putrescible Waste		
Special Waste Type 1		
Special Waste Type 3		
Solid hazardous waste		
Liquid hazardous waste		

13. The licence holder must record the total amount of liquid waste (in tonnes) received onto the premises at the Liquid Waste Facility or TWIP for each calendar month.

Infrastructure monitoring

14. The licence holder must undertake infrastructure monitoring in accordance with the requirements specified in Table 9 and record the results of all such monitoring.

Table 9: Infrastructure monitoring

Process description	Parameter	Monitoring location	Unit	Frequency	Method
Deep well injection of wastewater via the PWD wells	Wellhead pressure	Schedule 1: Map of discharge points to land and monitoring locations Z-WI1 and Z-WI2 Discharge Point	kPa	Continuous	None specified
	A Annulus pressure				
	B Annulus pressure				
	Flowline temperature downstream of choke		°C		
	Flowline pressure downstream of choke		kPa		
Deep well injection of wastewater via	Wellhead pressure	Schedule 1: Map of discharge points to	kPa	Daily	None specified

Process description	Parameter	Monitoring location	Unit	Frequency	Method
the TWIP wells	A Annulus pressure	land and monitoring locations WDW1 and WDW2			
Wastewater treatment	Inflow	Schedule 1: Map of discharge points to land and monitoring locations Permanent WWTP - flowmeter monitoring point Bridging WWTP – flowmeter monitoring point	kL/day	Continuous	None specified
	Outflow				
	pH		-	Quarterly	NATA accredited laboratory or in accordance with licence holder approved internal laboratory procedures
	Total suspended solids		mg/L		
	Total recoverable hydrocarbons		mg/L		
	5-day Biochemical Oxygen Demand (BOD5)		mg/L		NATA accredited laboratory
	Total Nitrogen		mg/L		
	Total Phosphorous		mg/L		
	Anionic surfactants		mg/L		
	E. coli		CFU/100mL		
Class 3 Drainage system	Standard suite of PFAS compounds	Schedule 1, Figure 8: Map of Class 3 drainage monitoring locations: SW-S1, SW-S2, SW-S3, SW-S4, SW-S5 and SW-S6	µg/L	Monthly if stormwater is discharged from the Class 3 Drainage system in that month	Ultra trace analysis at a NATA Accredited laboratory
	Total Mercury		mg/L		NATA accredited laboratory
	Total recoverable hydrocarbons		mg/L		NATA accredited laboratory[1]

Note 1: Inclusive of Silica Gel Cleanup where TRH is detected
Note 2: Monitoring locations are indicative and subject to change on the provision that locations remain representative of each stormwater catchment area within the Class 3 drainage system

Groundwater monitoring

15. The licence holder must monitor groundwater for concentrations of the identified

parameter(s) in accordance with Table 10.

Table 10: Groundwater monitoring of ambient concentrations

Monitoring well location	Parameter	Unit	Trigger level	Frequency	Method	
					Sampling	Analysis
Monitoring wells: GW-GTP-30, GW- GTP-31 , GW-GTP-32 , GW- GTP-33 , GW-GTP-34 , GW- GTP-35 , GW-GTP-36 and GW-GTP-37 as seen in Figure 7 of Schedule 1	Standing water level	m(AHD) and m(BGL)	-	Quarterly	In field spot sample	NATA Accredited laboratory or in accordance with licence holder approved internal laboratory procedures
	pH	pH units	-		Spot sample, in accordance with AS/NZS 5667.11	
	Electrical conductivity	µS/cm @ 25°C	-			
	TDS	mg/L	-			
	Standard suite of PFAS compounds	µg/L	LOR[1]			Ultra trace analysis at a NATA Accredited laboratory
Monitoring Wells: DWDB1-MW02, DWDB2-MW03, GW-RD05-MW02 and GW-RD05-MW03 As seen in Figure 7 of Schedule 1	Standard suite of PFAS compounds	µg/L	LOR[1]	Quarterly		
	Total recoverable hydrocarbons	mg/L	LOR			NATA accredited laboratory[2]
	Total Mercury	mg/L	0.00004			NATA accredited laboratory

Note 1: As specified in column LOR (water) for each compound specified in Table 17
Note 2: Inclusive of Silica Gel Cleanup where TRH is detected

Specified Actions

16. The licence holder must not, at any location on the Premises, deposit any soil sourced from the Area 20B PFAS containing soil stockpile unless:

(a) that soil is first sampled by suitably qualified and experienced personnel in accordance with Chapter 18 of the PFAS NEMP;

(b) samples are provided to a NATA accredited laboratory for soil testing for the standard suite of PFAS compounds; and

(c) test results from the soil samples indicate the standard suite of PFAS compounds are below the LOR for soil as per Table 15; OR

(d) the soil is being transferred into sealed containers prior to removal off Barrow Island.

17. The licence holder must prepare an Environmental management, maintenance, and operating plan in accordance with Chapter 10.3.11 *Maintenance and management*

planning, of the *PFAS NEMP* for the Area 20B PFAS containing soil stockpile in the area labelled 20B in Figure 6 Schedule 1 by 31 May 2025 that details how the essential functioning requirements as listed in chapter 10.2.2 of the NEMP will be met.

18. The licence holder must prepare and submit an Investigation and Management Plan (IMP) to the CEO by 31 August 2025 which includes:

(a) the location of all currently identified areas likely to be exposed to PFAS on the Premises;

(b) investigations to identify and assess the extent of PFAS contamination in the water and soil of the Premises including timeframes for commencement and completion of investigations;

(c) where proposed, measures to remove or treat PFAS containing soil and water and timeframes for the implementation of these measures;

(d) investigations from 18(b) should also identify and assess the extent of other contaminants in water and soils and when describing measures to remove or treat PFAS containing soil and water required by 18 (c);and

(e) measures to prevent migration of PFAS and other contaminants into the environment from areas identified in 18(a) or by investigations in accordance with 18(b).

(f) annual reporting commitments to be submitted to the CEO; and

(g) a tabulated summary of commitments to address 18(b) – (f).

19. Licence holder must not bring or allow PFAS containing fill material or other PFAS containing substances or material onto the Premises which may result in the discharge of PFAS to the environment.

Records / Reporting

Records

20. 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 that is performed in the course of complying with condition 1 of this licence;

(c) monitoring programmes undertaken in accordance with conditions 3, 9, 11, 12, 13, 14, 15 and 16 of this licence;

(d) the Register required to be kept in accordance with condition 21; and

(e) complaints received under condition 24 of this licence.

21. The licence holder must maintain a Soil Movement Register that records all soil or fill movements within the premises, which must include:

(a) the volume of soil or fill material moved;

(b) the source area and destination area of the soil or fill material movement; and

(c) the time period of each movement.

22. The books specified under condition 20 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 for the duration of the licence; and

(d) be available to be produced to an inspector or the CEO as required.

Notification

23. The licence holder must, within 7 days of becoming aware of any non-compliance with conditions of this licence, notify the CEO in writing of that non-compliance and include in that notification the following information:

(a) which condition was not complied with;

(b) the time and date when the non-compliance occurred;

(c) if any environmental impact occurred as a result of the non-compliance and if so what that impact is and where the impact occurred;

(d) the details and result of any investigation undertaken into the cause of the non-compliance;

(e) what action has been taken and the date on which it was taken to prevent the non-compliance occurring again; and

(f) what action will be taken and the date by which it will be taken to prevent the non-compliance occurring again.

Complaints management

24. 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.

Annual Audit Compliance Report

25. 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 120 days after the end of that annual period an Annual Audit Compliance Report in the approved form

Annual Environmental Report

26. The licence holder must submit to the CEO by no later than 120 days after the end of each annual period, an Annual Environmental Report for the previous annual period for the conditions listed in Table 11, and which provides information in accordance with the corresponding requirement set out in Table 11.

Table 11: Annual Environmental Report requirements

Condition	Requirement
3 Monitoring of discharges to air	Tabulated monitoring data results and time-series graphs in Microsoft Excel format for each monitoring location showing concentrations of all parameters over a minimum three year period (where sufficient data allows). An interpretation of the monitoring data including comparison to historical trends and emission limits (where applicable). Copies of original monitoring, laboratory and analysis reports submitted by third parties.
9 Monitoring of discharges to land	Tabulated monitoring data results and time-series graphs in Microsoft Excel format for each monitoring location showing concentrations of all parameters over a minimum three year period (where sufficient data allows). An interpretation of the monitoring data including comparison to historical trends and emission limits (where applicable).
11 Waste-receival monitoring	Monthly summary of the waste received/removed (where applicable) for each waste type and the relevant waste facility.
12 Waste removal monitoring	
13 Liquid waste receival monitoring	
14 Infrastructure monitoring	Summary of monitoring data results for each monitoring location. An interpretation of the monitoring data including comparison to historical trends and licence holder trigger levels (where applicable). Details of any changes to sampling locations and catchment areas as per footnote 2.
15 Groundwater monitoring	Tabulated monitoring data results and time-series graphs in Microsoft Excel format for each monitoring location showing concentrations of all parameters over a minimum three year period (where sufficient data allows). An interpretation of the monitoring data including comparison to historical trends and trigger levels as per Table 10 (where applicable). The details and results of any investigation undertaken into the cause of any exceedance/s of the trigger level as per Table 10 and any management measures taken or proposed in relation to the exceedance/s Copies of original monitoring, laboratory and analysis reports submitted by third parties.
16 Soil sampling	All sampling and testing data, information including locations (GPS locations and depths), dates of sampling and laboratory test results for each sample.
24 Complaints	Summary of complaints received and any action taken to investigate or respond to any complaint.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The Premises boundary is shown in the map below.

Figure 1: Premises boundary

Site layout map

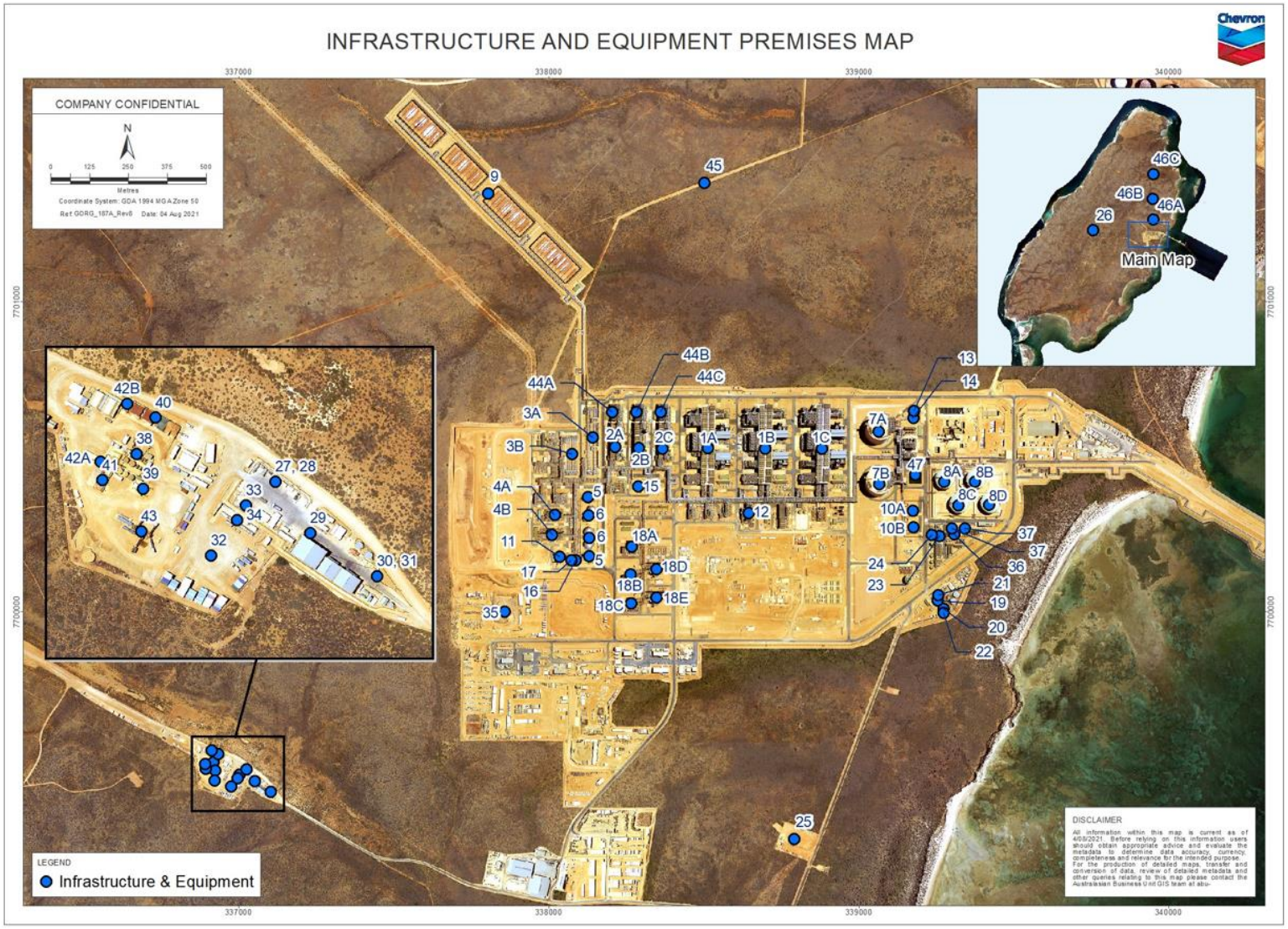
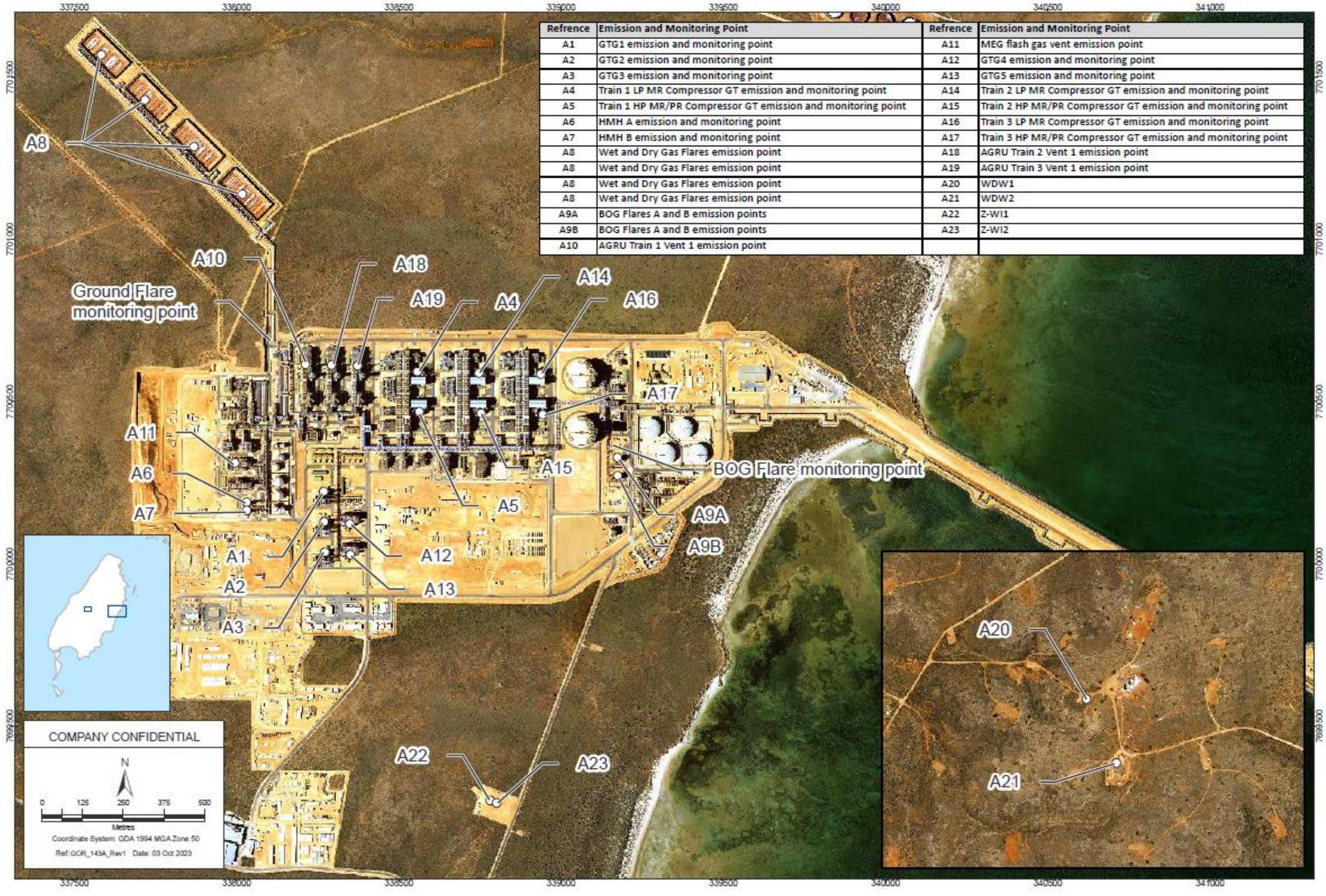


Figure 2: Map of infrastructure and equipment locations

L9102/2017/1 (Date of last amendment: 24 February 2025)

Map of discharge points to air and monitoring locations



Refrence	Emission and Monitoring Point	Refrence	Emission and Monitoring Point
A1	GTG1 emission and monitoring point	A11	MEG flash gas vent emission point
A2	GTG2 emission and monitoring point	A12	GTG4 emission and monitoring point
A3	GTG3 emission and monitoring point	A13	GTG5 emission and monitoring point
A4	Train 1 LP MR Compressor GT emission and monitoring point	A14	Train 2 LP MR Compressor GT emission and monitoring point
A5	Train 1 HP MR/PR Compressor GT emission and monitoring point	A15	Train 2 HP MR/PR Compressor GT emission and monitoring point
A6	HMH A emission and monitoring point	A16	Train 3 LP MR Compressor GT emission and monitoring point
A7	HMH B emission and monitoring point	A17	Train 3 HP MR/PR Compressor GT emission and monitoring point
A8	Wet and Dry Gas Flares emission point	A18	AGRU Train 2 Vent 1 emission point
A8	Wet and Dry Gas Flares emission point	A19	AGRU Train 3 Vent 1 emission point
A8	Wet and Dry Gas Flares emission point	A20	WDW1
A8	Wet and Dry Gas Flares emission point	A21	WDW2
A9A	BOG Flares A and B emission points	A22	Z-WI1
A9B	BOG Flares A and B emission points	A23	Z-WI2
A10	AGRU Train 1 Vent 1 emission point		

Figure 3: Map of discharge points to air and monitoring locations

Map of discharge points to land and monitoring locations

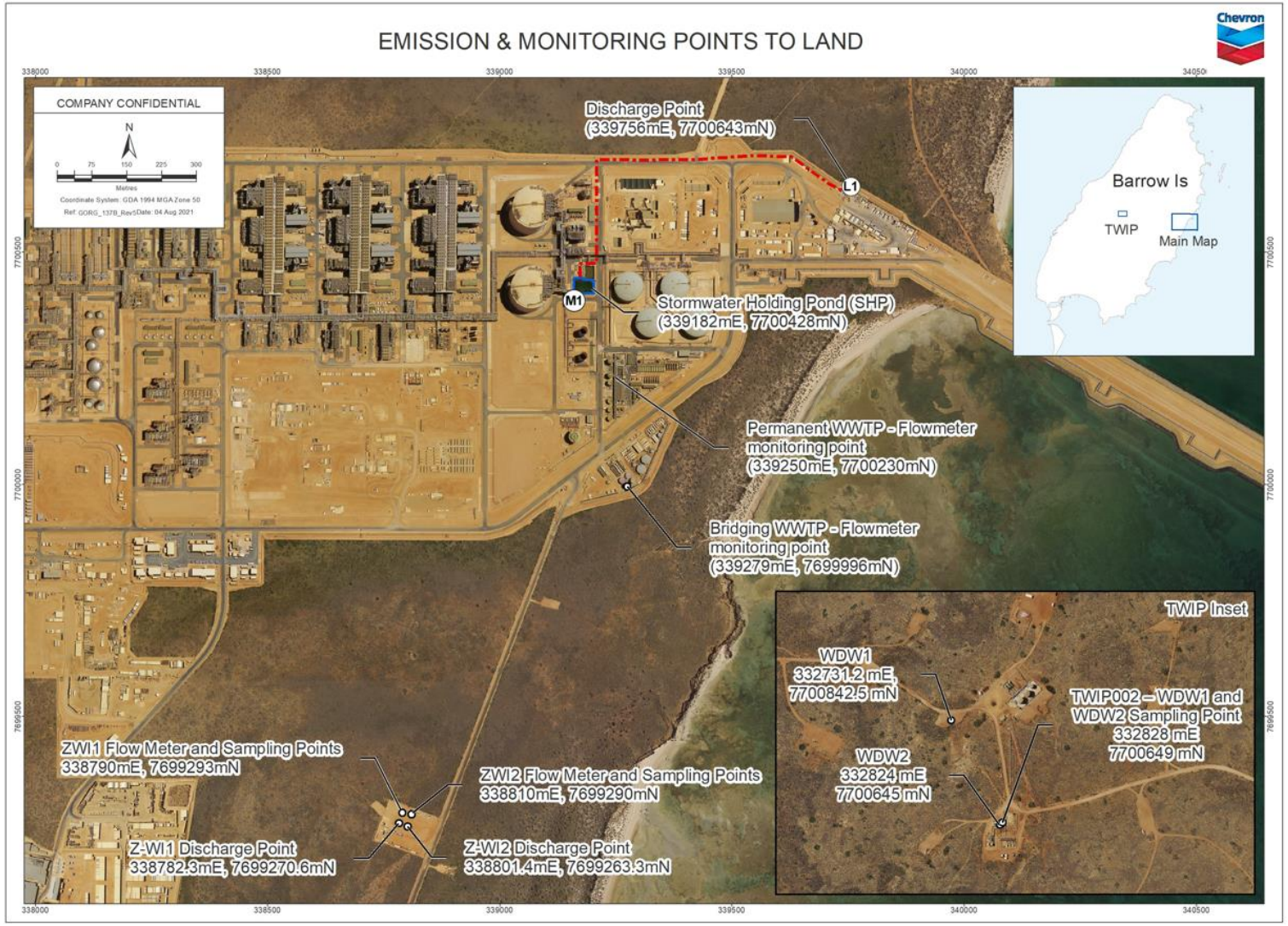
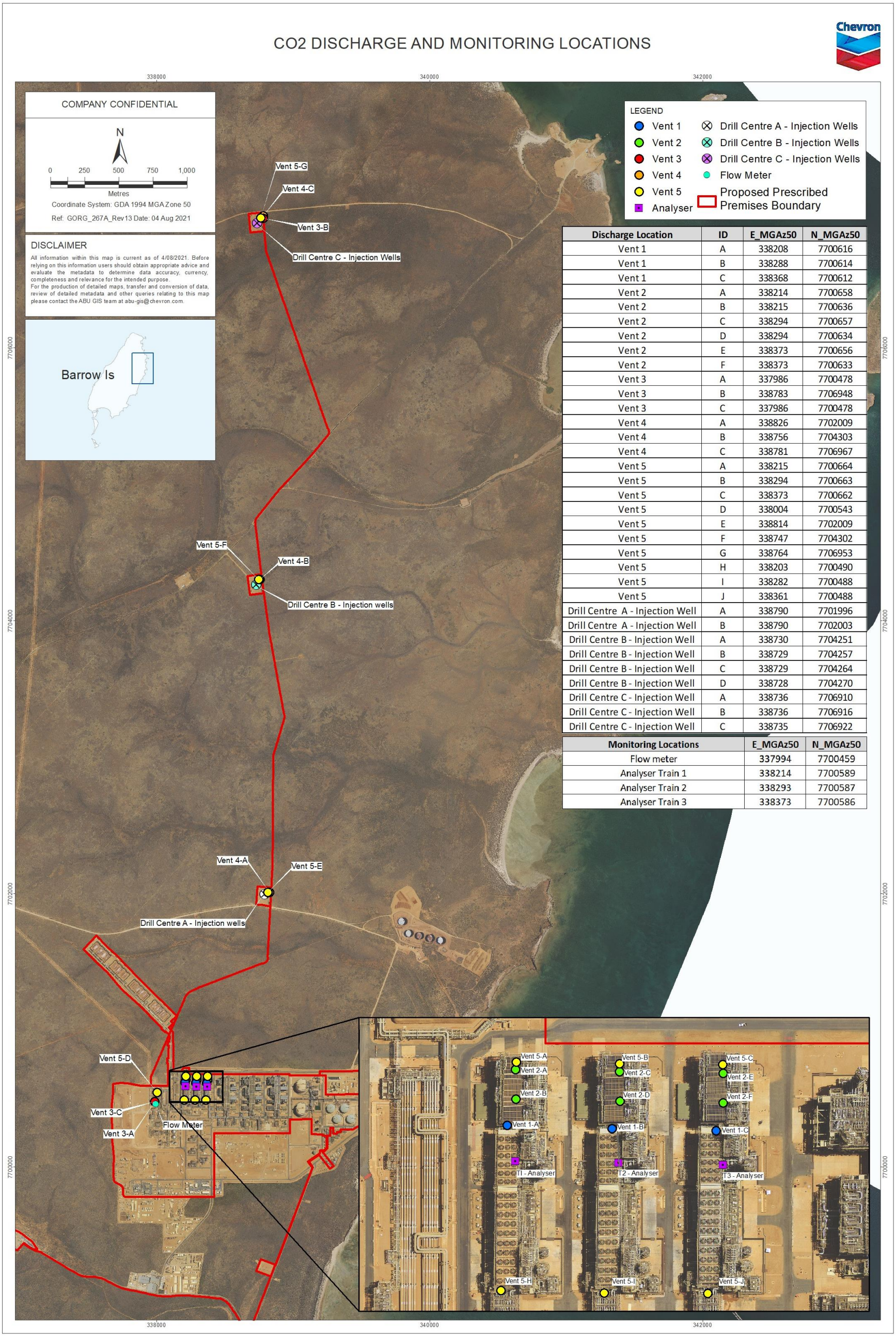


Figure 4: Map of discharge points to land and monitoring locations

L9102/2017/1 (Date of last amendment: 24 February 2025)

Map of reservoir CO_2 discharge and monitoring points



Discharge Location	ID	E_MGAz50	N_MGAz50
Vent 1	A	338208	7700616
Vent 1	B	338288	7700614
Vent 1	C	338368	7700612
Vent 2	A	338214	7700658
Vent 2	B	338215	7700636
Vent 2	C	338294	7700657
Vent 2	D	338294	7700634
Vent 2	E	338373	7700656
Vent 2	F	338373	7700633
Vent 3	A	337986	7700478
Vent 3	B	338783	7706948
Vent 3	C	337986	7700478
Vent 4	A	338826	7702009
Vent 4	B	338756	7704303
Vent 4	C	338781	7706967
Vent 5	A	338215	7700664
Vent 5	B	338294	7700663
Vent 5	C	338373	7700662
Vent 5	D	338004	7700543
Vent 5	E	338814	7702009
Vent 5	F	338747	7704302
Vent 5	G	338764	7706953
Vent 5	H	338203	7700490
Vent 5	I	338282	7700488
Vent 5	J	338361	7700488
Drill Centre A - Injection Well	A	338790	7701996
Drill Centre A - Injection Well	B	338790	7702003
Drill Centre B - Injection Well	A	338730	7704251
Drill Centre B - Injection Well	B	338729	7704257
Drill Centre B - Injection Well	C	338729	7704264
Drill Centre B - Injection Well	D	338728	7704270
Drill Centre C - Injection Well	A	338736	7706910
Drill Centre C - Injection Well	B	338736	7706916
Drill Centre C - Injection Well	C	338735	7706922

Monitoring Locations	E_MGAz50	N_MGAz50
Flow meter	337994	7700459
Analyser Train 1	338214	7700589
Analyser Train 2	338293	7700587
Analyser Train 3	338373	7700586

Figure 5: Map of reservoir CO_2 discharge and monitoring points

Map of Area 20B PFAS containing soil stockpile.

Figure 6: Map of Area 20B – Location of PFAS containing soil stockpile.

Map of groundwater monitoring well locations

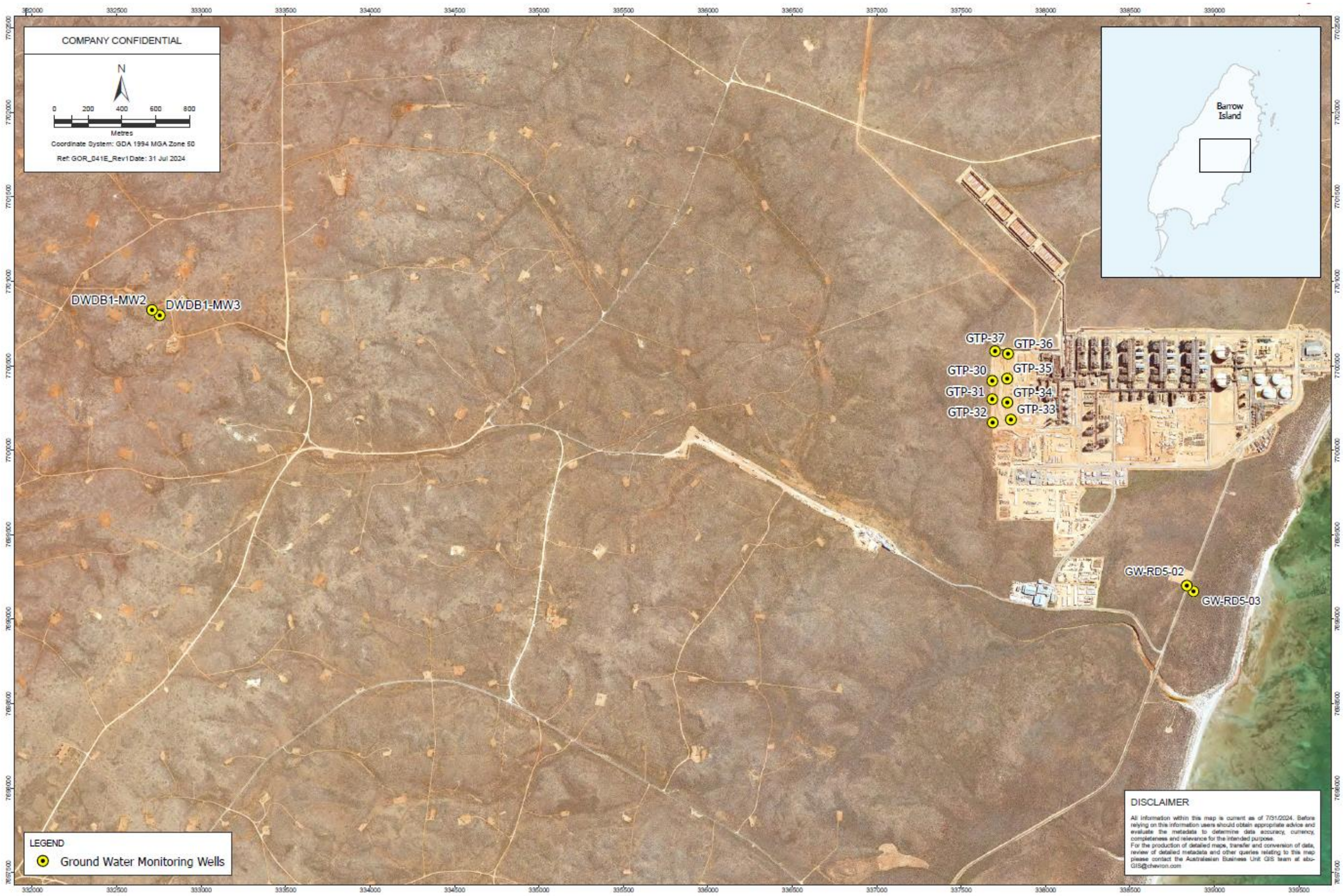


Figure 7: Map of locations of groundwater monitoring wells

Figure 8: Map of Class 3 drainage monitoring locations

L9102/2017/1 (Date of last amendment: 24 February 2025)

Schedule 2: Primary Activities

Infrastructure and equipment

The Primary Activity infrastructure and equipment situated on the Premises is listed in Table 12.

Table 12: Infrastructure and equipment

	Infrastructure	Site layout map reference
Prescribed Activity Categories 10 and 34		
1	3 x LNG trains	1A, 1B, 1C
2	3 x acid gas removal units	2A, 2B, 2C
3	Janz and Gorgon inlet processing units consisting of separate slug catchers and condensate stabiliser units	3A, 3B
4	Janz and Gorgon monoethylene glycol (MEG) regeneration plants	4A, 4B
5	4 x 2,403 m^3 lean MEG storage tanks	5
6	4 x 4,719 m^3 rich MEG storage tanks	6
7	2 x 180,000 m^3 LNG storage tanks	7A, 7B
8	4 x 38,000 m^3 condensate storage tanks	8A, 8B, 8C, 8D
9	Wet and dry ground flares	9
10	2 x elevated BOG flares	10A, 10B
11	Heating medium heaters	11
12	DomGas plant	12
13	602 m^3 ethane refrigerant storage tanks	13
14	2,443 m^3 propane refrigerant storage tank	14
15	2,792 m^3 aMDEA storage tank	15
16	319 m^3 hydrochloric acid injection tank	16
17	319 m^3 sodium hydroxide storage tank	17
Prescribed Activity Category 52		
18	5 x Frame 9 GTGs	18A, 18B, 18C,18D, 18E
Prescribed Activity Category 54		
Bridging WWTP		
19	3 x membrane bioreactor treatment trains	19
20	2 x equalisation tanks	20
21	Aerobic digester tank with 2 x sludge centrifuges	21
22	2 x treated effluent tanks	22

	Infrastructure	Site layout map reference
Permanent WWTP		
23	PWWTP comprising flow equalisation, pre-anoxic, aeration, aerobic digester, post-anoxic, chlorine contact and treated water backwash tanks within a concrete bunded compound	23
Prescribed Activity Category 61		
24	Liquid waste facility disposal water tanks	24
25	Permanent disposal wells	25
26	Temporary wastewater injection plant	26
Prescribed Activity Category 61A		
27	General sorting and unloading area	27
28	Waste sorting and bailing area	28
29	Putrescible waste sorting and compacting area including 2 x rotary food waste dryers	29
30	Vehicle wash down area	30
31	Oily water treatment system	31
32	Container and skip bin storage area	32
33	Dangerous goods storage area	33
34	Bunded waste storage area	34
35	Waste concrete storage area at the GTP	35
Prescribed Activity Category 73		
36	7 x 110 m^3 diesel fuel tanks	36
37	2 x 160 m^3 diesel fuel tanks	37
Prescribed Activity Category 77		
38	Cement silo and concrete batching plant	38
39	Generator and diesel storage	39
40	5 x aggregate storage bays	40
41	Truck wash area	41
42	Settlement and stormwater ponds	42A, 42B
43	Aggregate wash plant	43
Directly related activities		
44	3 x CO_2 compression modules each containing two compression strings	44A, 44B, 44C
45	CO_2 transport pipeline	45

	Infrastructure	Site layout map reference
46	3 x CO_2 injection drill centres with associated injection wells as per below: • Drill Centre A with 2 injection wells, • Drill Centre B with 4 injection wells, • Drill Centre C with 3 injection wells.	46A, 46B, 46C
Other activities		
47	Stormwater drainage system including stormwater holding pond, oily water sump and discharge point (L1)	47

Site layout

The Primary Activity infrastructure and equipment is set out on the Premises in accordance with the site layout specified on the Site layout map in Schedule 1.

Schedule 3: Monitoring

Monitoring of discharges to air

Table 13: Monitoring of discharges to air

Discharge point	Monitoring location Schedule 1: Map of discharge points to air and monitoring locations	Parameter	Frequency	Averaging period	Unit[1, 3]	Method
GTG1 to GTG5	A1 – A3 A12, A13	Volumetric flow rate	Quarterly if operating	30 minutes	m^3/s	USEPA Method 2
		NO_x			mg/m^3	USEPA Method 7E or 7D
		CO			mg/m^3	USEPA Method 10
		Fuel consumption	Continuous	Monthly	m^3	None specified
GT1 to GT3	A4, A5 A14, A15 A16, A17	Volumetric flow rate	Quarterly if operating	30 minutes	m^3/s	USEPA Method 2
		NO_x			mg/m^3	USEPA Method 7E or 7D
		CO			mg/m^3	USEPA Method 10
Heating Medium Heater A	A6	Fuel consumption	Continuous	Monthly	m^3	None specified
Heating Medium Heater B	A7					
Wet and Dry Ground Flare	A8	Volume [of gas vented or flared]				
Boil Off Gas Flare A	A9A					
Boil Off Gas Flare B	A9B					
AGRU1 to AGRU3	A10 A18, A19					
MEG Flash Gas Compressor	A11					

Note 1: All units are referenced to STP dry.
Note 2: Monitoring shall be undertaken to reflect Normal Operating Conditions.
Note 3: Concentration units for all gases are referenced to 15% O_2.

Monitoring of discharges to land

Table 14: Monitoring of discharges to land

Discharge point	Monitoring location	Parameter	Frequency	Averaging period	Unit	Sampling method	Analytical method
Stormwater Holding Pond	Schedule 1: Map of discharge points to land and monitoring locations Monitoring point M1	Total recoverable hydrocarbons	Prior to every discharge to L1	NA	mg/L	AS5667.1: 1998 and AS5667.10:1998	NATA Accredited or in accordance with licence holder approved internal laboratory procedures
		pH			-		
		Total suspended solids			mg/L		
		Electrical conductivity			µS/cm @ 25°C		
		Standard suite of PFAS compounds			µg/L		NATA Accredited ultra trace analysis
Z-WI1 discharge point Z-WI2 discharge point WDW1 and WDW2	Schedule 1: Map of discharge points to land and monitoring locations – Z-WI1 flow meter and sampling points – Z-WI2 flow meter and sampling points – TWIP002 (WDW1 and WDW2 sampling point)	Volumetric flow rate	Continuous	NA	m^3/day	None specified	None specified
		Total recoverable hydrocarbons	Monthly	Spot sample	mg/L		NATA accredited or in accordance with licence holder approved internal laboratory procedures
		pH[1]			-		
		Total suspended solids			mg/L		
Drill Centre A to Drill Centre C Injection Wells	Schedule 1: Map of reservoir CO_2 discharge and monitoring points Flow Meter	Injection rate	Continuous	daily	m^3	NA	None specified

Discharge point	Monitoring location	Parameter	Frequency	Averaging period	Unit	Sampling method	Analytical method
	Schedule 1: Map of reservoir CO_2 discharge and monitoring points Analyser Train 1 to Analyser Train 3	Hydrocarbon (including BTEX)	Continuous	daily	%(mole)	NA	None specified
		H_2S	Monthly	monthly	ppm	ISO 10715	ISO 19739
		BTEX					ISO 6974

Note 1: In-situ non-NATA accredited analysis permitted
Note 2: In instances where the CO_2 analysers are not continuously available, daily hydrocarbon sampling is permitted

PFAS standard monitoring suite and limit of reporting requirements

Table 15: Standard suite of PFAS compounds and LOR

Chemical group	PFAS compound	LOR (soil) mg/kg	LOR (water) µg/L
Perfluoroalkyl Sulfonic Acids	Perfluorobutane sulfonic acid (PFBS)	0.0002	0.0005
	Perfluoropentane sulfonic acid (PFPeS)		0.0005
	Perfluorohexane sulfonic acid (PFHxS)		0.0005
	Perfluoroheptane sulfonic acid (PFHpS)		0.0005
	Perfluorooctane sulfonic acid (PFOS)		0.0002
	Perfluorodecane sulfonic acid (PFDS)		0.0005
Perfluoroalkyl Carboxylic Acids	Perfluorobutanoic acid (PFBA)	0.001	0.002
	Perfluoropentanoic acid (PFPeA)	0.0002	0.0005
	Perfluorohexanoic acid (PFHxA)		
	Perfluoroheptanoic acid (PFHpA)		
	Perfluorooctanoic Acid (PFOA)		
	Perfluorononanoic acid (PFNA)		
	Perfluorodecanoic acid (PFDA)		
	Perfluoroundecanoic acid (PFUnDA)		
	Perfluorododecanoic acid (PFDoDA)		
	Perfluorotridecanoic acid (PFTrDA)		
	Perfluorotetradecanoic acid (PFTeDA)	0.0005	
Perfluoroalkyl Sulfonamides	N-Methyl PFO sulfonamide (MeFOSA)	0.0005	0.001
	N-methyl-PFO sulfonamidoacetic acid (MeFOSAA)	0.0002	0.0005
	N-Methyl PFO sulfonamidoethanol (MeFOSE)	0.0005	0.001
	Perfluorooctane sulfonamide (FOSA)	0.0002	0.0005
	N-Ethyl PFO sulfonamide (EtFOSA)	0.0005	0.001
	N-Ethyl PFO sulfonamidoethanol (EtFOSE)	0.0005	0.001
	N-ethyl-PFO sulfonamidoacetic acid (EtFOSAA)	0.0002	0.0005
(n:2) Fluorotelomer Sulfonic Acids	4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	0.0005	0.001
	6:2 Fluorotelomer sulfonic acid (6:2 FTSA)		
	8:2 Fluorotelomer sulfonic acid (8:2 FTSA)		
	10:2 Fluorotelomer sulfonic acid (10:2 FTSA)		
PFAS Sums	Sum of PFHxS and PFOS (lab reported)	0.0002	0.0002
	Sum of PFASs (n=28)		