Licence number L9224/2019/1

Licence holder Yara Pilbara Fertilisers Pty Ltd

**ACN** 095 441 151

Registered business address Level 5, 182 St Georges Terrace

PERTH WA 6000

**DWER file number** DER2019/000563

**Duration** 21/04/2020 to 20/04/2040

Date of amendment 20/10/2025

Premises details Yara Pilbara Fertilisers Ammonia Plant

Village Road

BURRUP WA 6714

Legal description -

Part of Lot 564 on Deposited Plan 31023 Certificate of Title Volume 2222 Folio 200 As defined by the coordinates in Schedule 2:

Premises boundary

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations</i> 1987)	Assessed production capacity
Category 31: Chemical manufacturing: premises (other than premises within category 32) on which chemical products are manufactured by a chemical process.	Not more than 950,000 tonnes per annual period
Category 85: Sewage facility: premises —	Not more than 36 m³ per
(a) on which sewage is treated (excluding septic tanks); or	day
(b) from which treated sewage is discharged onto land or into waters.	

This amended licence is granted to the licence holder, subject to the attached conditions, on 20 October 2025, by:

Amine Fisher

SENIOR MANAGER, HEAVY INDUSTRIES

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

# **Licence history**

Reference				
Number	Date	Summary of changes		
W3589/2002/1	15 May 2002	New works approval for construction of the Ammonia Plant.		
W3791/2002/1	30 June 2003	Amended the previous works approval (largely relating to monitoring requirements).		
W3838/2002/1	20 October 2003	New works approval for the construction of a sewage treatment facility to support the Ammonia plant's construction.		
R1571/2003/1	1 December 2003	New registration to operate the sewage treatment facility (Category 85). This was revoked and the sewage treatment facility included into the operating licence.		
L7997/2002/1	15 April 2005	Licence granted for operation of the Ammonia Plant.		
L7997/2002/1	12 December 2005	Licence amended to alter the detection limits for wastewater sampling.		
L7997/2002/2	18 April 2006	Licence was reissued with amendments relating to monitoring and discharge requirements.		
L7997/2002/3	19 April 2007	Licence review including a risk assessment of premises for Category 31.		
L7997/2002/4	17 April 2008	Licence reissued.		
L7997/2002/5	20 April 2009	Licence reissued.		
L7997/2002/6	15 April 2010	Licence reissued with amendments to remove duplicate reporting conditions and update premises boundary.		
L7997/2002/7	14 April 2011	Licence reissued.		
L7997/2002/8	19 April 2012	Licence reviewed to incorporate a more comprehensive suite of conditions for monitoring and reporting emissions and discharges from the site.		
L7997/2002/9	18 April 2013	Licence re-issue		
L7997/2002/10	16 April 2014	Licence re-issue		
L7997/2002/11	16 April 2015	Licence re-issue		
W5920/2015/1	7 January 2016	New works approval for the replacement of existing WWTP with a new rotating biological contactor WWTP.		
L7997/2002/11	20 April 2016	Licence amended to align with requirements of MS 586 which was amended in August 2015 under section 45C of the EP Act. The amendment authorised an increase in the nominated design capacity of the Ammonia Plant and extended the licence duration to 20 April 2020.		
L7997/2002/11	29 June 2018	Licence amendment to incorporate operation of the Technical Ammonium Nitrate (TAN) Plant, and amend the prescribed premises boundary to include both the Ammonia and TAN plants.		
L7997/2002/11	2 April 2019	Amendment to the licence in the form of an amendment notice to extend the date associated with TN and TP limits for discharges from the Premises WWTP from 1 April 2019 to 30 November 2019.		
L9224/2019/1	17 April 2020	New licence issued in place of L7997/2002/1 for operation of the Ammonia Plant. L7997/2002/1 expires on 20 April 2020. L9224/2019/1 took effect from 21 April 2020.		
L9224/2019/1	20 October 2025	Amendment to authorise installation and use of a valve to redirect process syngas from the backend vent to the production flare.		

## 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 means:
  - (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 that 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 Table 1.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirements	Infrastructure location
Sewage treatment plant	Production must not exceed 36 m³/day.  Treated effluent may only be discharged to:  the Evaporation pond; or  a storage tank pending offsite disposal.	
Western sedimentation basin  Eastern sedimentation basin	<ul> <li>For storage of stormwater and cooling tower blowdown water only.</li> <li>Lined with 1.5 mm thick HDPE to achieve a permeability of less than 1 x 10-9 m/s.</li> <li>Water may be discharged from the sedimentation basins to the King Bay tidal flats via dedicated pipelines.</li> </ul>	
Evaporation pond	<ul> <li>For storage and evaporation of treated effluent received from the Sewage treatment plant.</li> <li>Fenced, gated and signposted to prevent unauthorised entry.</li> <li>Maintained with a minimum operational freeboard of 500 mm.</li> <li>Stormwater runoff from site drainage shall be diverted away from the pond embankments.</li> <li>Lined with 2 mm thick HDPE to achieve a permeability of less than 1 x 10<sup>-9</sup> m/s.</li> </ul>	As shown in Schedule 1: Maps of infrastructure locations
Primary reformer Package boilers	Must be operated with low NOx burners.	
Diesel generator	Must only be operated for start-up of the Ammonia Plant or for emergency power.	
Startup heater	<ul> <li>Must only be operated for start-up of the Ammonia Plant.</li> <li>Must be operated with low NOx burners.</li> </ul>	
Production flare and storage flare	<ul> <li>Pilot lights must be lit at all times during plant operation and immediately prior to commencing start-up of the plant.</li> <li>Ammonia directed to the flare must be combusted.</li> </ul>	
Seawater cooling circuit pipeline	A daily visual inspection of the pipeline must be undertaken and a record of each inspection must be maintained.	NA

Site infrastructure and equipment	Operational requirements	Infrastructure location
Backend vent tie in valve HV-1019A	Valve must remain in a closed position during normal operating conditions.	As shown as HV- 1019A in Schedule 1: Maps of infrastructure locations

- **2.** The licence holder must:
  - (a) construct and/or install the infrastructure and/or equipment;
  - (b) in accordance with the corresponding design and construction / installation requirements; and
  - (c) at the corresponding infrastructure location,

as set out in Table 2

Table 2: Design and construction / installation requirement

Infrastructure and equipment	Design and construction / installation requirements	Infrastructure location	
Backend vent tie in valve HV- 1019A	80mm Cage Guided Globe Control Valve (HV-1019A) must be installed to redirect syngas from recycle stage to the production flare	As shown as HV- 1019A in Schedule 1: Maps of infrastructure locations	

- 3. The licence holder must within 28 days of the infrastructure required by condition 2 being installed;
  - (a) undertake an audit of their compliance with the requirements of condition 2; and
  - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- **4.** The Environmental Compliance Report required by condition 3 must include as a minimum the following:
  - (a) certification by a suitably qualified engineer that the items of infrastructure or components thereof, as specified in condition 2 have or have not, been installed in accordance with the relevant requirements specified in condition 2;
  - (b) as installed plans for each item of infrastructure or component of infrastructure specified in condition 2; and
  - (c) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

## **Emissions and discharges**

#### Discharges to air

5. The licence holder must ensure that 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)	Discharge point location  As shown in Schedule 1: Map of authorised discharge point locations
NOx, SO <sub>2</sub> , PM,	Primary reformer stack	36	Discharge point A5
	Package boiler stack	30	Discharge point A6
CO, CO <sub>2</sub>	CO <sub>2</sub> stripper stack	60	Discharge point A7
NOx, PM, SO <sub>2</sub>	Start-up heater stack	30	Discharge point A8
H <sub>2</sub> , N <sub>2</sub>	Back-end vent (Vent A)	60	Discharge point A9
H <sub>2</sub> , N <sub>2</sub> , CH <sub>4</sub> ,	Front-end vent (Vent B)	35	Discharge point A10
NOx, NH <sub>3</sub> , N <sub>2</sub>	Production flare	35	Discharge point A11
NOx, NH <sub>3</sub> , N <sub>2</sub> ,	Storage flare	35	Discharge point A12
NOx, SO <sub>2</sub> , PM, CO, VOCs	Emergency diesel generator	12.2	Discharge point A13

6. The licence holder must ensure that emissions from the discharge point listed in Table 4 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 10.

**Table 4: Discharges to air limits** 

Discharge point	Emission	Limit (mg/m³)	
Primary reformer stack (A5)	NOx (as NO <sub>2</sub> )	180 <sup>1</sup>	
Package boiler stack (A6)	NOx (as NO <sub>2</sub> )	300 <sup>1</sup>	

Note 1: emission limits for the Primary reformer stack, and Package boiler stack do not apply during Start-up.

#### **Discharges to marine waters**

7. The licence holder must ensure that emissions specified in Table 5 are discharged only from the corresponding discharge point and only at the corresponding discharge point location set out in Table 5.

Table 5: Authorised discharge points to marine waters

Emission	Discharge point	Discharge point location As shown in Schedule 1: Map of authorised discharge point locations
Process effluent (Ammonia Plant)	MUBRL	Discharge Point MUBRL
Process effluent (TAN Plant)	MUBRL	Discharge Point MUBRL
Stormwater and cooling tower	Western sedimentation basin to King Bay tidal flats	Discharge Point WSB
blowdown	Eastern sedimentation basin to King Bay tidal flats	Discharge Point ESB

**8.** The licence holder must ensure that emissions from the discharge point listed in Table 6 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 16.

Table 6: Discharge to marine waters limits

Discharge point	Parameter	Limit (including units)	Averaging period	
		Less than 5°C above ambient seawater temperature	- 80 <sup>th</sup> percentile of daily averages	
	Temperature	Less than 2°C above ambient seawater temperature 80% of the time		
	pН	6.9 – 8.3	NA 4 la la c	
	Electrical conductivity	75 000 μs/cm	Monthly	
	Ammonia as ammoniacal nitrogen (NH <sub>3</sub> -N)	30 164 μg/L		
	Arsenic (III)	140 μg/L		
Ammonia Plant and TAN	Arsenic (V)	275 μg/L		
Plant input to MUBRL (MUBRL)	Cadmium	36 μg/L		
(MUDRL)	Chromium (III)	459 μg/L		
	Chromium (VI)	8.5 μg/L		
	Cobalt 61 μg/L		Monthly rolling	
	Copper	11 μg/L	average	
	Lead	134 μg/L		
	Mercury	1.4 μg/L		
	Nickel	427 μg/L		
	Selenium	183 μg/L		
	Silver	49 μg/L		
	Vanadium	3050 μg/L		
	Zinc	419 µg/L		
Western sedimentation	Total suspended solids	80 mg/L		
basin to King Bay tidal flats (WSB)	pH	6 – 9		
Eastern sedimentation basin to King Bay tidal	Total recoverable hydrocarbon	15 mg/L	Spot sample	
flats (ESB)	MDEA	2 mg/L	1	

#### **Noise emissions**

**9.** The licence holder must ensure that noise emissions do not exceed the limit of 65 dB(A) when monitored in accordance with condition 20.

### **Monitoring**

#### **Discharges to air**

- **10.** 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 7.

Table 7: Monitoring of discharges to air

Discharge point	Monitoring location	Parameter	Frequency	Averaging period	Unit <sup>1</sup>	Method <sup>2,3</sup> (sampling and analysis)
Primary reformer stack (A5) and Package boiler stack (A6)  Schedule 1: Map of monitoring locations A5 and A6	Flow rate	Quarterly until 31 May 2020		m³/s	USEPA Method 2	
	1		60 minutes	mg/m³ g/s	USEPA Method 7E	
	Flow rate	Continuous		m³/s		
		NOx (as NO <sub>2</sub> )	after 31 May 2020	60 minutes	mg/m³ g/s	CEMS

- Note 1: Concentrations to be corrected to STP at 3% oxygen on a dry basis.
- Note 2: Duplicate sample runs conducted consecutively on the same sampling day.
- Note 3: Where any USEPA method refer to USEPA Method 1 for the sampling plane, this must be read as a referral to AS/NZS 4323.1:2001.
- 11. 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 in successive quarters.
- 12. The licence holder must ensure that sampling required by condition 10 is undertaken at sampling locations in accordance with the current version of AS 4323.1 or relevant part of the CEMS Code.
- 13. The licence holder must ensure that all non-continuous sampling and analysis undertaken pursuant to condition 10 is undertaken by a holder of a current accreditation from the National Association of Testing Authorities (NATA) for the methods of sampling and analysis relevant to the corresponding parameter.
- **14.** For any CEMS operated in accordance with condition 10 the licence holder must ensure that the CEMS is operated, maintained and calibrated in accordance with the CEMS Code.

#### **Ambient air quality**

- **15.** The licence holder must monitor the air for concentrations of the parameter listed in Table 8:
  - (a) at the corresponding monitoring location;
  - (b) in the corresponding unit;
  - (c) at no less that the corresponding frequency;
  - (d) for the corresponding averaging period;
  - (e) using the corresponding method;

as set out in Table 8.

**Table 8: Monitoring of ambient air concentrations** 

Parameter	Monitoring location	Unit	Frequency	Averaging Period	Sampling Method	Analytical Method
NH <sub>3</sub>	Schedule 1: Map of monitoring locations AA1, AA2, AA3, AA4	ppm	Continuous	NA	Diffusion Visible and audible alarm at 35 ppm	Electrochemical

#### **Discharges to marine waters**

- **16.** 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 9.

Table 9: Monitoring of discharges to marine waters

Discharge		Parameter <sup>2</sup>	Frequency	Averagin	Unit	Meth	od
point	location			g period		Sampling	Analysis
		Flow <sup>1</sup>			m³/ day		
		Temperature <sup>1</sup>	0		0C		
		pH <sup>1</sup>	Continuous	NA	NA		
		Electrical conductivity <sup>1</sup>			µs/cm		
		Dissolved oxygen <sup>1</sup>	Weekly	Spot sample	%		
		Ammonia as ammoniacal nitrogen (NH <sub>3</sub> -N)					
		Total Phosphorous					NATA accredited
		Arsenic (III)					
	Schedule 1: Map of	Arsenic (V)	Daily	Weekly composite of daily spot sample	μg/L	AS5667.1- 1998 and AS5667.10- 1998	
MUBRL	monitoring	Cadmium					
	locations	Chromium (III)					
	W1 and W4	Chromium (VI)					
		Cobalt					
		Copper					
		Lead					
		Mercury					
		Nickel					
		Selenium					
		Silver					
		Vanadium					
		Zinc					
		Total recoverable hydrocarbons					
		MDEA 3,4					
		Total suspended solids	Maximum of one hour		mg/L		
WSB and ESB	Schedule 1:	pH <sup>1</sup>			NA		
	Map of monitoring locations W2 and W3	Total recoverable hydrocarbons		Spot sample	mg/L		NATA accredited
		MDEA <sup>3</sup>	after that for the duration of the discharge		μg/L		

Note 1: In-field non-NATA accredited analysis permitted.
Note 2: All metals must be analysed as total and filterable.
Note 3: Non-NATA accredited laboratory analysis permitted.

Note 4: Sampling and analysis for MDEA is not applicable to monitoring location W4.

#### Department of Water and Environmental Regulation

17. The licence holder must ensure that weekly monitoring is undertaken such that there are at least four days in between the days on which samples are taken.

#### **Ambient groundwater**

- **18.** The licence holder must monitor the groundwater for concentrations of the parameters listed in Table 10:
  - (a) at the corresponding monitoring location;
  - (b) in the corresponding unit;
  - (c) at no less that the corresponding frequency;
  - (d) for the corresponding averaging period;
  - (e) using the corresponding sampling method; and
  - (f) the corresponding analytical method

as set out in Table 10.

Table 10: Monitoring of ambient groundwater concentrations

Parameter <sup>3,4,5</sup>	Monitoring	Unit	Frequency	Averaging	Method	
	Location			Period	Sampling	Analysis
pH <sup>1</sup>		NA				
Electrical conductivity <sup>1</sup>		μS/cm				
Redox potential <sup>1</sup>		mV				
Temperature <sup>1</sup>		°C				
Dissolved Oxygen <sup>1</sup>		%				
MDEA <sup>2</sup>						
Ammonia as ammoniacal nitrogen (NH <sub>3</sub> -N)						
Nitrate and nitrite						
Aluminium						
Cadmium						
Chromium (III)						
Chromium (VI)	Schedule 1: Map of					
Copper	monitoring locations BFC, BFE, BFF, BFG	μg/L	Quarterly	Spot sample	AS/NZS 5667.11	NATA accredited
Nickel						
Lead						
Sulfate	US1, US3					
Total dissolved solids						
Total Kjeldal nitrogen						
Total nitrogen as N and total oxidised						
Total recoverable hydrocarbons						
Total phosphorus as P						
Total organic carbon						
Total alkalinity						
Major cations (K+, Na+, Ca <sup>2</sup> +,Mg <sup>2</sup> +)						
Zinc	1					

Note 1: In-field non-NATA accredited analysis permitted. Samples must be measured in a flow-through cell.

Note 5: Metal samples are to be filtered for analysis

Note 2: Non-NATA accredited laboratory analysis permitted.

Note 3: Limits of reporting must be lower than the site-specific proposed trigger levels specified in the Western Environmental Groundwater data review, Yara Pilbara Operations Water Quality Monitoring Procedure 2016, prepared for Yara Pilbara Fertilisers Pty Ltd.

Note 4: Ultra-trace analysis must be used where possible if matrix interference causes a consequential increase of the limits of reporting.

#### **Process monitoring**

- **19.** The licence holder must undertake monitoring of treated effluent from the sewage treatment plant:
  - (a) at specified monitoring location;
  - (b) for the corresponding parameter;
  - (c) at the corresponding frequency;
  - (d) for the corresponding averaging period;
  - (e) in the corresponding unit; and
  - (f) using the corresponding method

as set out in Table 11.

**Table 11: Treated effluent monitoring** 

Monitoring	Parameter	Frequency	Averaging	Unit	Method	
location			period		Sampling	Analysis
	Flow <sup>1</sup>	Continuous	NA	m³/day		
Schedule 1: Map of monitoring locations L1	Total nitrogen		Spot sample			
	Total phosphorus	Quarterly		μg/L	AS5667.1:1 998	
	BOD				and AS5667.10:	NATA
	pH <sup>1</sup>			NA	1998 and - AS/NZS 2031:2001	accredited
	Total suspended solids			µg/L		
	E.coli			cfu/100mL		

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

#### **Noise emissions**

- **20.** The licence holder must monitor noise:
  - (a) at the corresponding monitoring location;
  - (b) in the corresponding unit;
  - (c) at no less that the corresponding frequency;
  - (d) for the corresponding averaging period;
  - (e) using the corresponding sampling method; and
  - (f) the corresponding analytical method

as set out in Table 12.

**Table 12: Monitoring of noise** 

Parameter	Monitoring location	Unit	Frequency	Averaging Period	Monitoring method
Noise L <sub>A 10</sub>	Schedule 1: Map of monitoring locations N1, N2 and N3	dB	Quarterly	Not less than 15 minutes, and not more than 4 hours	Part 3 – Noise measurement  Environmental Protection (Noise) Regulations 1997

**21.** 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.

#### Monitoring during startup, shutdown and upset conditions

**22.** The licence holder must monitor and record the information listed in Table 13 in the corresponding unit for the event types as set out in Table 13.

Table 13: Startup, shutdown and upset condition monitoring

Event	Parameter/information	Unit
	Event type	NA
	Event cause	NA
	Start and finish date and time	NA
	Duration	Hours
Each startup, shut down or upset conditions event	Average and maximum rate of ammonia directed to the flare	g/s
	Total mass of ammonia flared	Tonnes
	Total mass of process gas flared	Tonnes
	Total mass of each gas vented (N <sub>2</sub> , H <sub>2</sub> , NH <sub>3</sub> , CH <sub>4</sub> , Ar, CO, CO <sub>2</sub> , C <sub>2</sub> H <sub>6</sub> , H <sub>2</sub> O)	Tonnes
	Total mass of process gas vented	Tonnes

## Records and reporting

- **23.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
  - (a) the calculation of fees payable in respect of this licence;
  - (b) the works conducted in accordance with condition 2 of this licence;
  - (c) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;
  - (d) monitoring programmes undertaken in accordance with conditions 10, 15, 16, 18, 19, 20 and 22 of this licence; and
  - (e) complaints received under condition 25 of this licence.
- **24.** The books specified under condition 23 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.
- 25. 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.
- **26.** The licence holder must, within seven days of becoming aware of any non-compliance with conditions 6, 8 and 9 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 noncompliance;
  - (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.
- **27.** 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 90 days after the end of that annual period an Annual Audit Compliance Report in the approved form.
- **28.** 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

requirement set out in

29.

Table 14, and which provides information in accordance with the corresponding

**30.** Table 14.

Table 14: Reporting requirements – Annual Environmental Report

Condition	Requirement
	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).
10 - Monitoring of discharges to air	An interpretation of the monitoring data including comparison to historical trends and emission limits.
	Copies of original monitoring, laboratory and analysis reports submitted by third parties.
15 - Ambient air monitoring	Summary of alarm threshold exceedances and actions taken.
16 - Monitoring of discharges to marine water	Tabulated monitoring data results and time-series graphs in Microsoft Excel format for each monitoring location showing concentrations of all parameters over
18 - Groundwater monitoring	a minimum three year period (where sufficient data allows).  An interpretation of the monitoring data including comparison to historical trends
19 - Process monitoring	and emission limits (where relevant).  Copies of original monitoring, laboratory and analysis reports submitted by third parties.
20 - Noise monitoring	
22 – Start-up, shut-down and upset condition events	A summary of ammonia plant startup, shutdown and upset condition events including dates, times, durations, reasons for each event, characterisation and quantification of gases vented and/or flared during each event, and commentary on how the emissions compared with inputs used in previous modelling for the Ammonia Plant.
25 - Complaints	Summary of complaints received and any action taken to investigate or respond to any complaint

## **Definitions**

In this licence, the terms in Table 15 have the meanings defined.

**Table 15: 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.
Approved form	the AACR Form template approved by the CEO for use and available via DWER's external website.
AS 4323.1	means the Australian Standard AS 4323.1 Stationary source emissions selection of sampling positions
AS/NZS 2031	means the Australian Standard AS/NZS 2031 Selection of containers and preservation of water samples for microbiological analysis
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 groundwater
ATU	Aerobic Treatment Unit
books	has the same meaning given to that term under the EP Act.
CEMS	Continuous Emission Monitoring System
CEMS Code	means the document "Continuous Emission Monitoring System (CEMS) Codes for Stationary Source Air Emissions", March 2016, Department of Environment Regulation, Perth WA
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
CH <sub>4</sub>	means methane
СО	means carbon monoxide

Term	Definition
CO <sub>2</sub>	means carbon dioxide
condition	a condition to which this works approval / licence is subject under section 62 of the EP Act.
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.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure has been constructed in accordance with the relevant conditions.
EP Act	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
freeboard	means the distance between the maximum water surface elevation and the top of retaining banks or structures at their lowest point
H <sub>2</sub>	means hydrogen
HDPE	High Density Polyethylene
Inspector	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 section 57 of the EP Act, subject to the specified conditions contained within.
Licence holder	means the occupier of the premises, being the person to whom this licence has been granted, as identified on the front of this licence.
MDEA	means methyl diethanolamine
MUBRL	Multi User Brine Return Line
N <sub>2</sub>	means nitrogen
NATA	means the (Australian) National Association of Testing Authorities.
NH <sub>3</sub>	means ammonia
normal operating conditions	means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions.
NOx	means oxides of nitrogen
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.

## Department of Water and Environmental Regulation

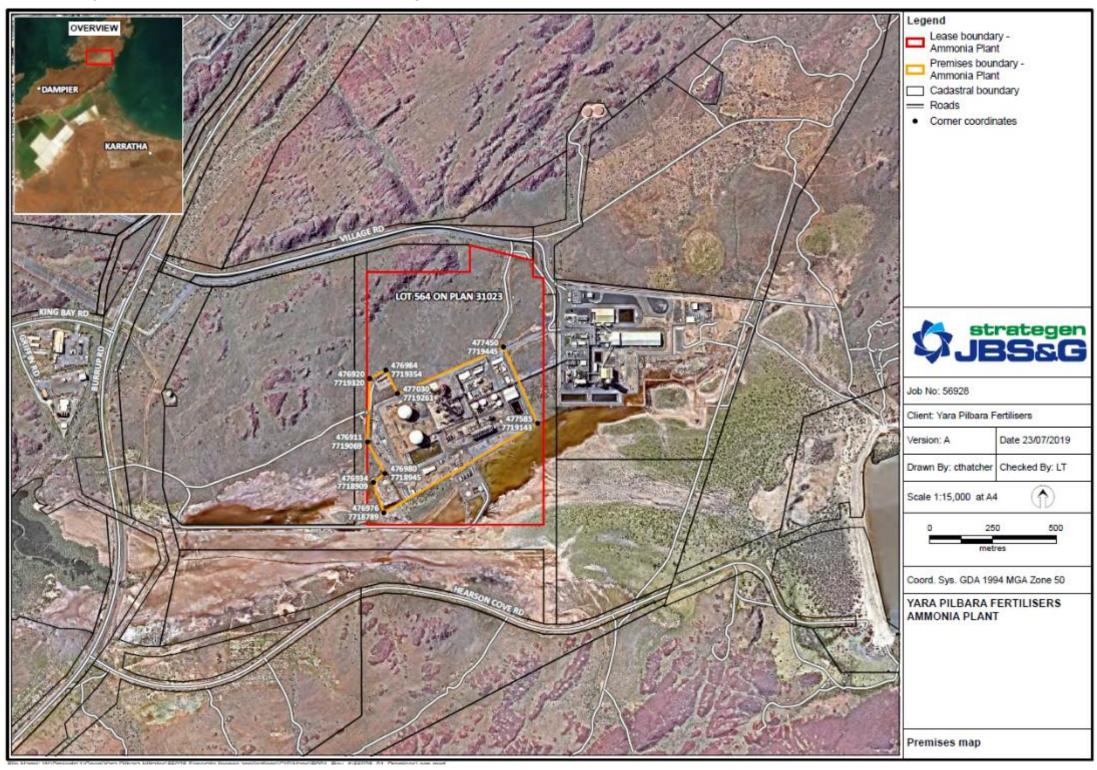
Term	Definition
Prescribed premises	has the same meaning given to that term under the EP Act.
SO <sub>2</sub>	means sulfur dioxide
suitably qualified	means a person who:
	(a) holds a Bachelor of Engineering (Chemical); and
	(b) has a minimum of at least three years of experience working in the field of process engineering.
Startup – Primary Reformer Furnace (Ammonia Plant)	means the period from when the furnace burners are ignited to when the vent valve on the Ammonia Recovery Unit is closed
Startup – Package Boiler (Ammonia Plant)	means the period from when the boiler burners are ignited to when the vent valve on the Ammonia Recovery Unit is closed
STP	means standard temperature and pressure (0° Celsius and 101.325 kilopascals respectively), dry
Upset conditions	means any situation apart from plant startup and shutdown where the backend vent redirection valve, HV1019A, is required to be opened
USEPA	United States (of America) Environmental Protection Agency
USEPA Method 2	means USEPA Method 2 <i>Determination of Stack Gas Velocity and Volumetric Flow Rate (type s pitot tube)</i>
USEPA Method 7E	means USEPA Method 7E Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)
Usual working day	means 0800-17000 hours, Monday to Friday excluding public holidays in Western Australia
VOCs	means volatile organic compounds

## **END OF CONDITIONS**

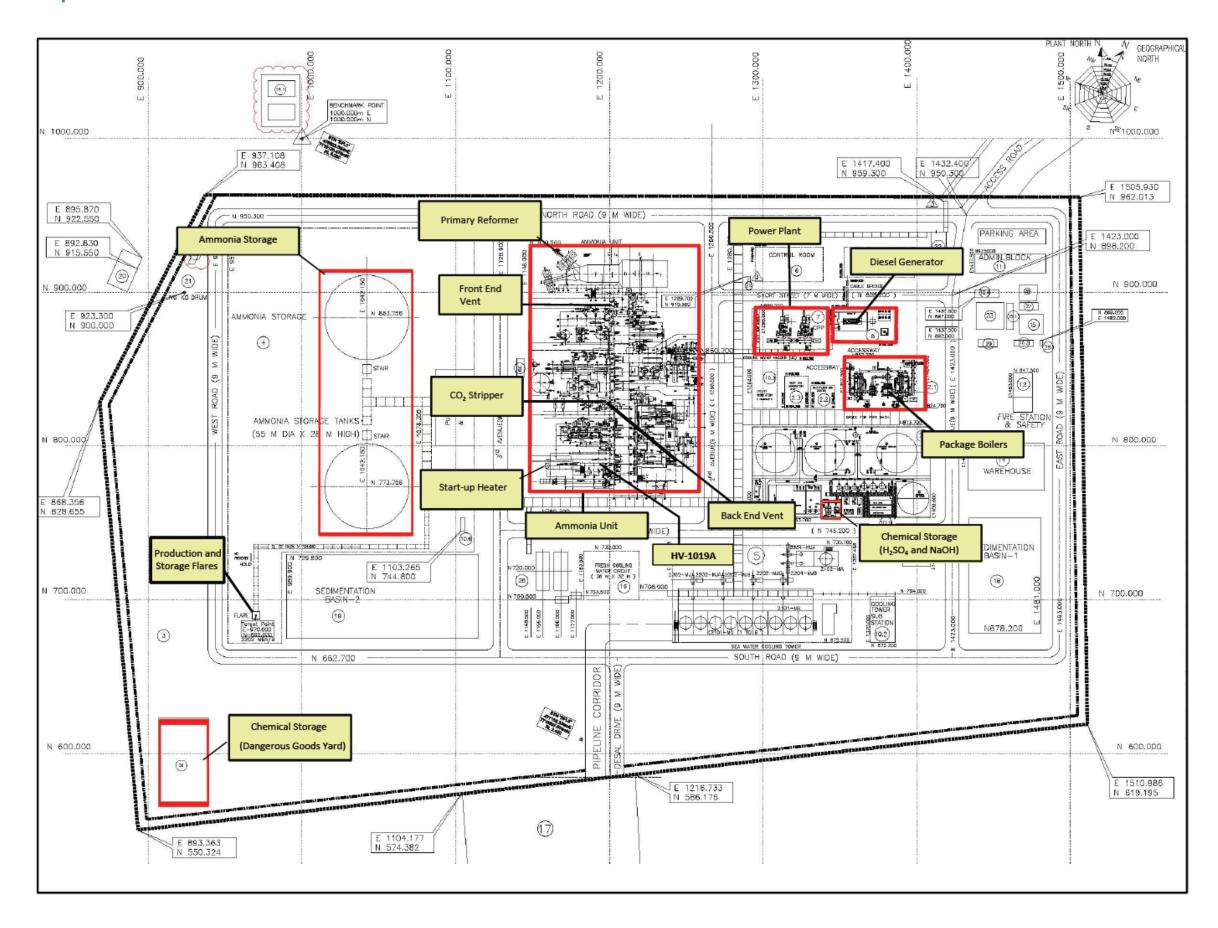
# **Schedule 1: Maps**

## **Premises map**

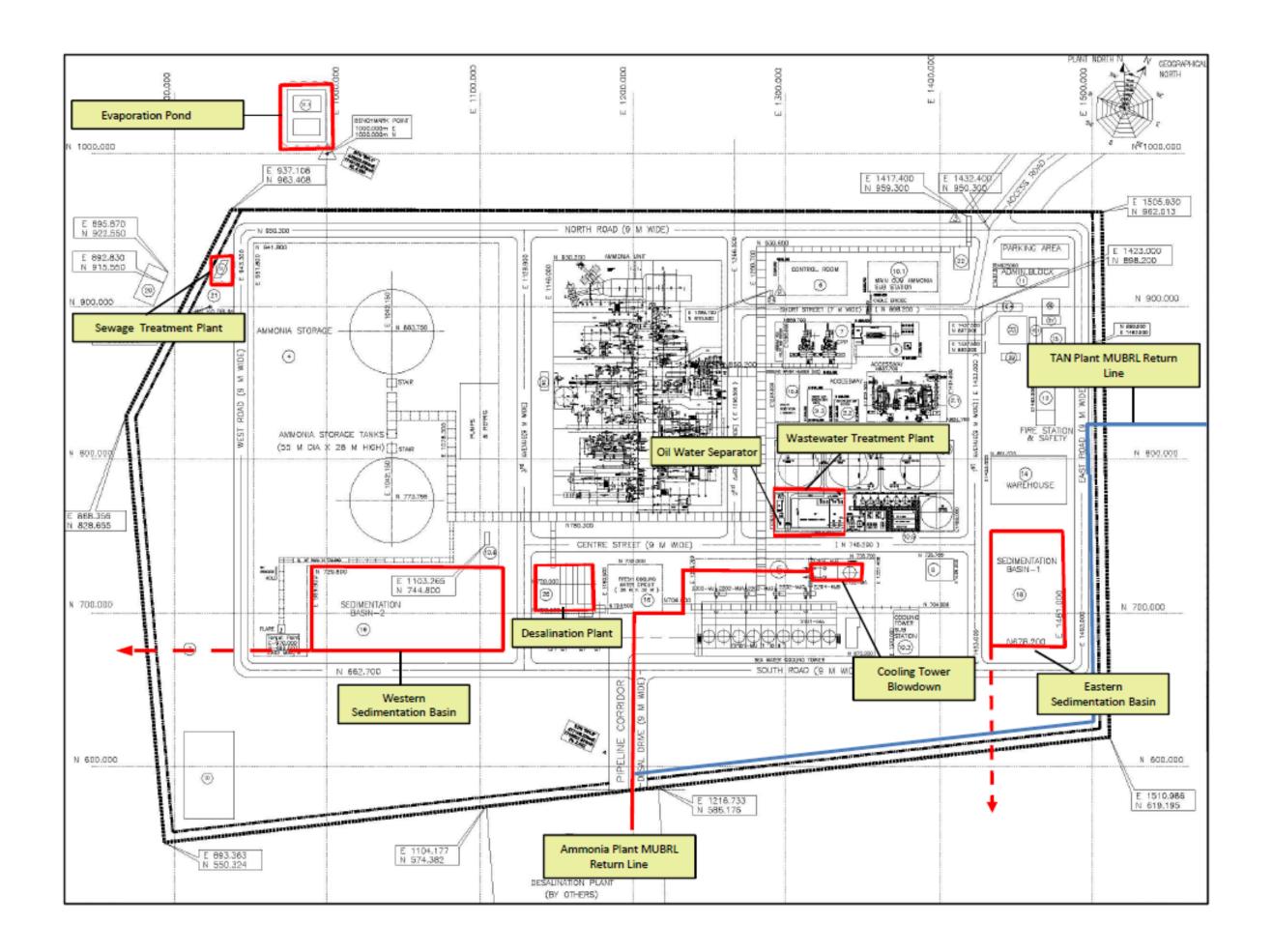
The boundary of the prescribed premises is shown in orange in the map below.



## **Maps of infrastructure locations**

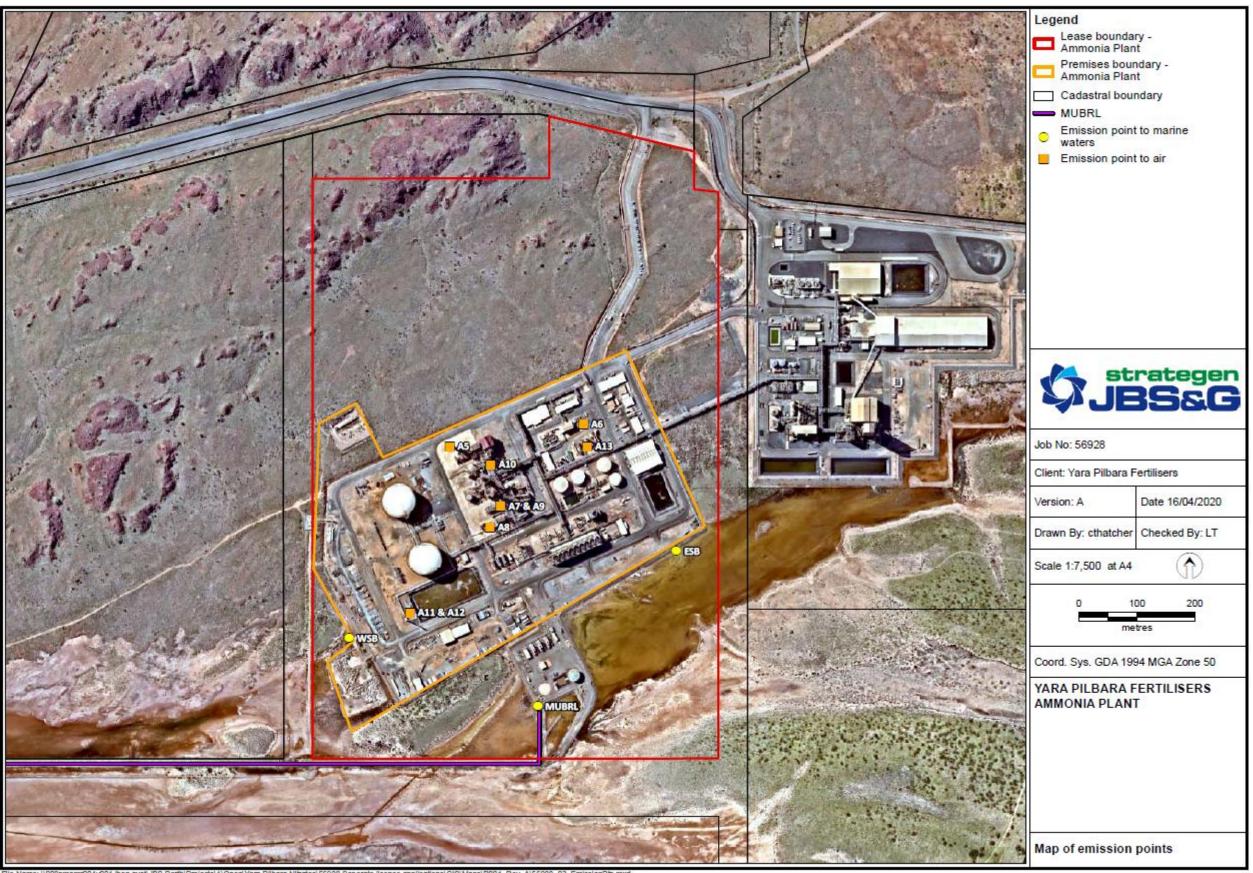


L9224/2019/1 (Licence Amended 20 October 2025)



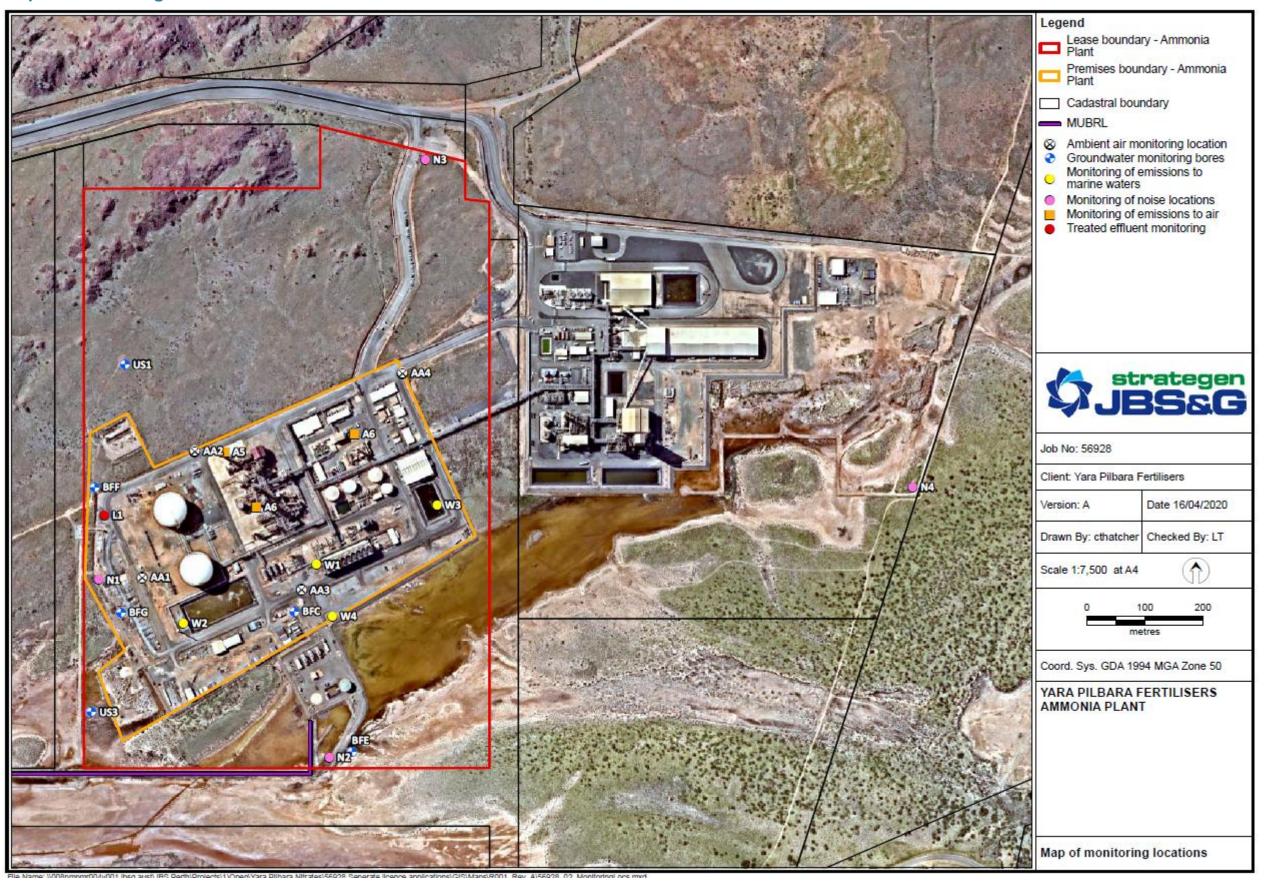
L9224/2019/1 (Licence Amended 20 October 2025)

Map of authorised discharge point locations



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## **Map of monitoring locations**



## **Schedule 2: Premises boundary**

The premises boundary is defined by the coordinates in Table 16.

Table 16: Premises boundary coordinates (GDA94)

Easting	Northing	Zone
476920	7719320	50
476984	7719354	50
477030	7719261	50
477450	7719445	50
477585	7719143	50
476976	7718789	50
476934	7718909	50
476980	7718945	50
476911	771906	50