



Licence number	L6036/1988/13	
Licence holder	Coogee Chlor Alkali Pty Ltd	
ACN	009 276 635	
Registered business address	Lot 501 Mason Road Kwinana WA 6167	
Application number	APP-0028414	
Duration	01/10/2014 to	30/09/2032
Date of issue	25/09/2014	
Date of amendment	12/11/2025	
Premises details	Coogee Chlor Alkali Kemerton Plant Marriott Road KEMERTON WA 6233	
	Legal description - Part of Lot 1 on Diagram 73196 and Part of Lot 510 on Plan 50377 as depicted in Schedule As defined by the coordinates in Schedule 2	

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 31: Chemical Manufacturing	90,000 tonnes per annum

This licence is granted to the licence holder, subject to the attached conditions, on 12 November 2025, by:

MANAGER PROCESS INDUSTRIES

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

Licence history

Date	Reference number	Summary of changes
25/9/2014	L6036/1988/13	Licence granted (re-issue)
4/6/2015	L6036/1988/13	Licence amended to allow for in house analysis of groundwater samples.
29/10/2015	L6036/1988/13	Licence amended to rename monitoring and recovery bores and formatted to current style
29/04/2016	L6036/1988/13	Expiry date amended to 30/09/2032.
12/11/2025	L6036/1988/13	Amendment to increase throughput to 90,000 tonnes following the construction of the TREX plant on site. Also formatted to current style.

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:
- (e) if dated, refers to that particular version; and
- (f) if not dated, refers to the latest version and therefore may be subject to change over time;
- (g) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (h) 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

- 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 requirement	Infrastructure location
1	Lurgi Processing plant - Electrolysis system - Catholyte System - Chlorine gas drying and compression - Chlorine Liquefaction & Storage - HCl Synthesis Unit - Sodium hypochlorite production (Cl₂ Absorption Tower) Hydrogen fired oil heater (steam boiler chimney)	Maintain: - Critical control set points managed by DCS system- auto shut-down systems; - Nitrogen purge capability; and - Chlorine absorption system.	Process Area Building as depicted in Figure 2, Schedule 1
2	Lurgi Hydrogen Safety Seal Vent	Maintain: - Continuous temperature control monitoring and alarms; and - Capability for N₂ injection for dilution	A4 as depicted in Figure 2, Schedule 1
3	HCl Gas Scrubber	Process Monitoring: PM3 – Water flowrate in HCl scrubber (in accordance with condition 11)	A2 as depicted in Figure 2, Schedule 1
4	Lurgi Sodium hypochlorite production – Cl ₂ Absorption Tower	Maintain: - Cl₂ absorption tower; 2 x Cl₂ in process detectors with interlocks to shutdown plant; and - vent stack to atmosphere Process Monitoring: PM1 – Caustic flowrate in Cl₂ gas absorber PM2 – Caustic flowrate in Gas Absorption tower PM4 – Free hydroxide in Caustic/Hypo tank (in accordance with condition 11)	A1 as depicted in Figure 2, Schedule 1

	Site infrastructure and equipment	Operational requirement	Infrastructure location
5	Hydrogen fired oil heater - steam boiler chimney (A3)	1. Must be capable of remote shutdown via DCS or manually Nitrogen purge system	A3 as depicted in Figure 2, Schedule 1
6	Lurgi Chlorine gas export system and pipeline	1. Must be capable of remote shutdown via DCS or manually 2. Must be capable of manual depressurisation 3. Must be Capable of being automatically isolated upon detection of anomalous operating conditions.	Not depicted
7	TREX Processing plant - Electrolysis system - Brine purification system - Catholyte System - Chlorine gas drying and compression - Sodium hypochlorite production - Caustic evaporation	Maintain: - Critical control set points managed by DCS system- auto shut-down systems; - Voltage Monitoring System with capability for continuous monitoring of cell voltage and inferred temperature; - Nitrogen purge capability; and - Chlorine absorption system .	TREX Plant as depicted in Figure 2, Schedule 1
8	TREX Hydrogen Stack	Maintain: - continuous temperature control monitoring and alarms; - capable of N₂ injection for dilution; - vent stack to atmosphere height not less than 14 metres.	A6 as depicted in Figure 2, Schedule 1
9	TREX Hypochlorite system	Maintain: - Cl₂ absorption tower; 2 x Cl₂ in process detectors with interlocks to shutdown plant. Interlocks triggered at Cl₂ ≥ 50ppm; - vent stack to atmosphere, height 15 meters; and - in process caustic flow transmitter in hypo-reactor and hypo-scrubber to monitor caustic flow rate is within approved range. Interlock for plant shutdown when beyond range. Process Monitoring: PM5 - caustic flow rate in hypo scrubber PM6 – caustic flow rate in hypo reactor PM7 – free hydroxide in caustic soda/hypochlorite tank (in accordance with condition 11)	A5 as depicted in Figure 2, Schedule 1

	Site infrastructure and equipment	Operational requirement	Infrastructure location
10	TREX Concrete effluent sump	The licence holder must 1. Prevent overtopping; 2. Maintain the level control system; 3. Maintain water stops for sealing concrete joints; and 4. Maintain the internal lining of vinyl ester fibreglass and HDPE membrane.	Not depicted
11	TREX Chlorine gas export system and pipeline	1. Must be capable of remote shutdown via DCS or manually; 2. Must be capable of manual depressurisation; and 3. Must be capable of being automatically isolated upon detection of anomalous operating conditions.	Not depicted

Emissions and discharges

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

Table 2: Authorised discharge points

Emission	Discharge point	Discharge point location
Cl ₂	Chlorine absorption tower vent (Process Area Building)	A1 on Schedule 1 Figure 2
HCl	HCl gas scrubber (Process Area Building)	A2 on Schedule 1 Figure 2
NO ₂ , particulates	Steam Boiler Chimney (Utilities)	A3 on Schedule 1 Figure 2
H ₂	Hydrogen safety seal vent (Process Area Building)	A4 on Schedule 1 Figure 2
Cl ₂	Hypochlorite production unit vent stack (TREX Plant)	A5 on Schedule 1 Figure 2
H ₂	Electrolysis area hydrogen gas vent (TREX Plant)	A6 on Schedule 1 Figure 2

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 9.

Table 3: Emission and discharge limits

Discharge point	Parameter	Limit
A1 – Process Area Building	Cl ₂	5 ppm
A5 – TREX Plant		

Monitoring

4. The licence holder must ensure that:
 - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
 - (b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
 - (c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.
5. The licence holder must ensure that monthly monitoring is undertaken at least 15 days apart.
6. The licence holder must record production or throughput data and any other process parameters relevant to any non-continuous or CEMS monitoring undertaken.
7. The licence holder must ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.
8. The licence holder must, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

Point source emissions to air monitoring

9. The licence holder must monitor emissions:
 - (a) from each discharge point;
 - (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 4.

Table 4: Emissions and discharge monitoring

Discharge point	Parameter	Frequency	Averaging period	Unit	Method
A1 – Lurgi chlorine adsorption tower vent stack	Cl ₂	Continuous	60 mins	ppm	Must comply with the CEMS code
A9 – TREX sodium hypochlorite system incorporating TREX Chlorine					

Discharge point	Parameter	Frequency	Averaging period	Unit	Method
Absorption Tower vent stack					

10. The licence holder must record the results of all monitoring activity required by condition 9.

Process monitoring

11. The Licensee must undertake the monitoring in Table 5 according to the specifications in that table.

Table 5 : Process monitoring

Monitoring point reference	Process description	Parameter	Units	Frequency	Method ¹
PM1 – Process Area Building	Chlorine gas absorber	Caustic flow rate	L/s m ³ /day	Continuous	None specified
PM2 – Process Area Building	Gas absorption tower	Caustic flow rate	L/s m ³ /day	Continuous	None specified
PM3 – Process Area Building	Hydrochloric acid scrubber	Water flow rate	L/s m ³ /day	Continuous (when in operation)	None specified
PM4 – Process Area Building	Caustic soda / hypochlorite tank	Free hydroxide	g/L	12 hourly	None specified
PM5 – TREX Plant	Hypo scrubber	Caustic flow rate	m ³ /hr	Continuous	None specified
PM6 – TREX Plant	Hypo reactor	Caustic flow rate	m ³ /hr	Continuous	None specified
PM7 – TREX Plant	Caustic soda / hypochlorite tank	Free hydroxide	g/L	12 hourly	None specified

Note 1: The Licensee must ensure that continuous monitoring equipment is operating correctly for at least 90% of the measurement intervals in every calendar month and for at least 95% of the measurement intervals in every twelve (12) consecutive calendar months.

Ambient monitoring

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

Table 6: Monitoring of ambient groundwater quality

Monitoring point reference and location on maps in Schedule 1	Parameter	Units	Averaging period	Frequency
Recovery bores NRB01, MB10, NRBO3r, MB21, MB22	pH ¹	-	Spot sample	Monthly
Monitoring bores KMS03, MB01 MB02, MB04, MB05, MB06, MB08, MB11r, MB13r ₂ , MB14 MB16, MB20,	Electrical conductivity ¹	µS/cm		
Recovery bores NRB01, MB10, NRBO3r, MB21, MB22	Volume	kL	Continuous	Monthly

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

Records and reporting

Records

13. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
- the name and contact details of the complainant, (if provided);
 - the time and date of the complaint;
 - the complete details of the complaint and any other concerns or other issues raised; and
 - the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
14. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
- the calculation of fees payable in respect of this licence;
 - any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;
 - monitoring programmes undertaken in accordance with conditions 11, 13 and 14 of this licence; and
 - complaints received under condition 13 of this licence.
15. The books specified under condition 14 must:
- 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.

Reporting

- 16.** 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 an Annual Audit Compliance Report in the approved form by 28 July each year.
- 17.** The licence holder must:
- (a) prepare an Environmental Report that provides information in accordance with Table 7 for the preceding annual period, and
 - (b) submit that Environmental Report to the CEO by 28 July each year.

Table 7: Environmental reporting requirements

Condition	Requirement
NA	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken
9	Chlorine
11	pH, Electrical conductivity, Volume
13	Complaints summary
-	Table showing the quantities of raw materials used and the quantity of products produced.
-	An assessment by a suitably qualified professional of the environmental effects of the activities on this premises on groundwater resources and the groundwater recovery program, including recommended changes.

- 18.** The licence holder must ensure that the Annual Environmental Report also contains:
- (a) any relevant process, production or operational data recorded under Condition 6; and
 - (b) an assessment of the information contained within the report against previous monitoring results and licence limits.
- 19.** The licence holder must ensure that results from CEMS are reported in the Annual Environmental Report as tabulated data and time series graphs including:
- (a) times and dates;
 - (b) unavailability of abatement;
 - (c) limit exceedances; and

- (d) an assessment of the information contained within the report against previous submissions and Licence limits.

Notification

- 20.** The licence holder must, within 7 days of becoming aware of any non-compliance with conditions 3 and 11 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.

Definitions

In this licence, the terms in Table 8 have the meanings defined.

Table 8: 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 are available on the Department's website).
annual period	a 12 month period commencing from 1 July until 30 June of the immediately following year.
AS 4323.1	means the Australian Standard AS4323.1 <i>Stationary Source Emissions Method 1: Selection of sampling positions</i>
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i>
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</i>
Averaging period	means the time over which a limit is measured or a monitoring result is obtained
CEMS	means continuous emissions monitoring system;
CEMS Code	means the current version of the Continuous Emission Monitoring System (CEMS) Code for Stationary Source Air Emissions, Department of Environment & Conservation, Government of Western Australia
CEO	means Chief Executive Officer of the department. “submit to / notify the CEO” (or similar), means either: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
department; DWER	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.
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)

Term	Definition
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.
monthly period	means a one-month period commencing from second day of a month until first day of the immediately following month.
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
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map Figure 1 in Schedule 1 to this licence.
Spot sample	means a discrete sample representative at the time and place at which the sample is taken
STP dry	means standard temperature and pressure (0°Celsius and 101.325 kilopascals respectively), dry
µS/cm	means microsiemens per centimetre

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).

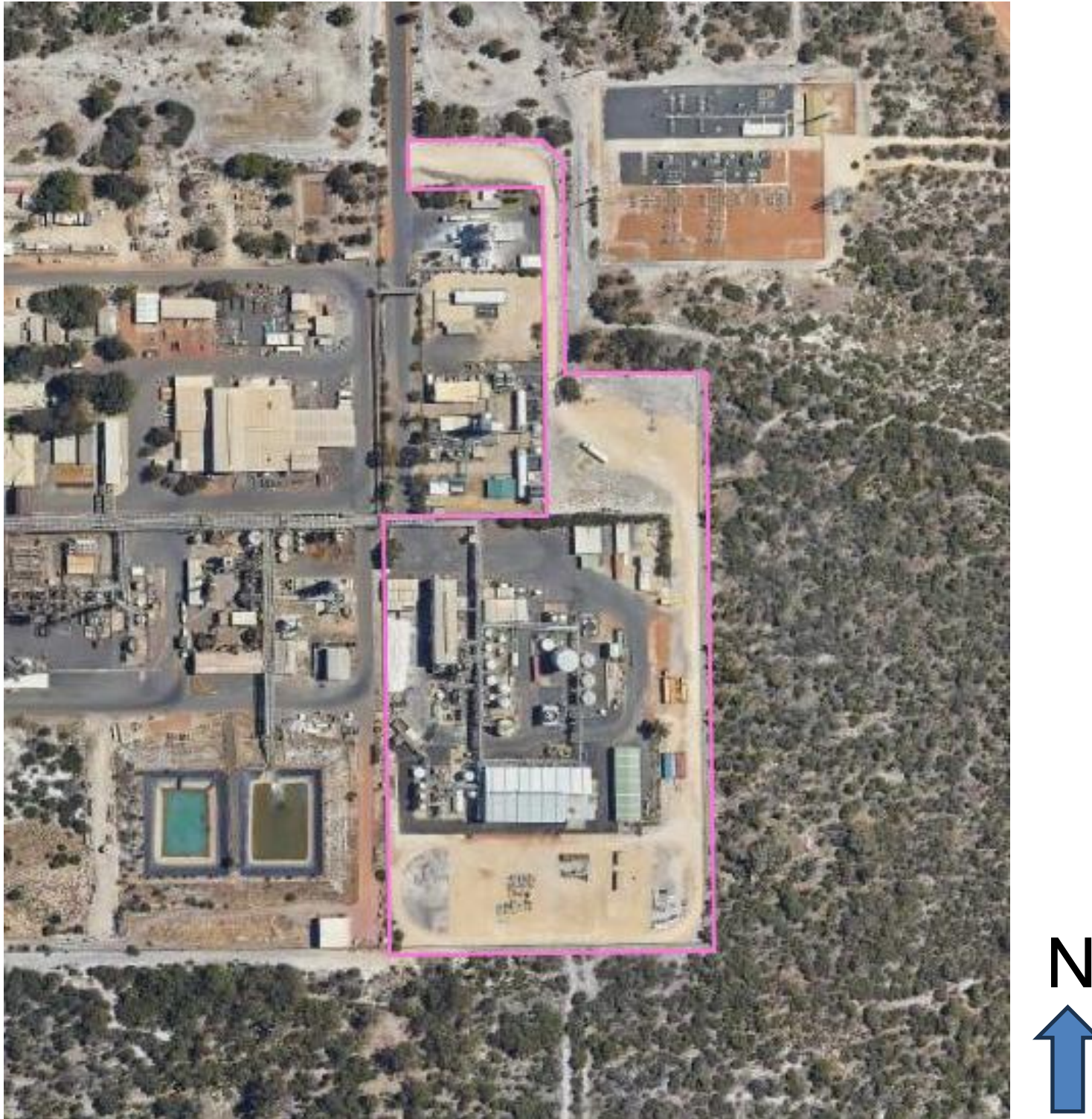


Figure 1: Map of the boundary of the prescribed premises



Figure 2: Plant layout

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 9.

Table 9: Premises boundary coordinates (PCG94)

	Easting	Northing
1.	44543.789	122962.166
2.	44702.778	122964.247
3.	44699.084	123246.383
4.	44630.09	123245.48
5.	44628.723	123349.866
6.	44618.593	123359.76
7.	44552.399	123358.894
8.	44552.704	123335.615
9.	44618.898	123336.482
10.	44620.995	123176.395
11.	44540.995	123175.77