Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L7291/1995/9
Licence holder	Cockburn Cement Limited
ACN	008 673 470
Registered business address	Cockburn Cement Ltd Level 1, 157 Grenfell Street ADELAIDE, South Australia 5000
DWER file number	2013/000895-1~1
Duration	29/04/2014 to 28/04/2025
Date of amendment	04/05/2023
Premises details	Dongara Lime Plant Kailis Drive DONGARA WA 6525 Legal Description – Mining Tenement M70/311 Victoria Location 11702 Kailis Drive DONGARA WA 6525

Prescribed premises category description (Schedule 1, ***Environmental Protection Regulations 1987***)	**Assessed production capacity**
Category 43: Cement or lime manufacturing – premises on which (a) Clay, lime sand or limestone material is used in a furnace or kiln in the production of cement clinker or lime; or (b) Cement clinker, clay limestone or similar material is ground.	No more than 100,000 tonnes of lime manufactured per annual period.
Category 12: Screening etc. of material: premise (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed ground, milled, sized or separated.	No more than 380,000 tonnes of lime sand screened per annual period.

This licence is granted to the licence holder, subject to the attached conditions, on 4 May 2023, by:

Caron Goodbourn

Digitally signed by Caron Goodbourn
Date: 2023.05.04 09:45:16 +08'00'

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

Licence history

Date	Reference number	Summary of changes
10/04/2014	L7291/1995/9	Licence reissue.
29/04/2016	L7291/1995/9	CEO initiated Notice of Amendment of licence expiry dates.
16/05/2022	L7291/1995/9	CEO initiated Notice of Amendment reporting requirements for AER and AACR.
04/05/2023	L7291/1995/9	Licence holder-initiated amendment to include Category 12- Screening to authorise the operation of mobile lime sand screening plant

Interpretation

In this licence:

(a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a condition, each row in a table constitutes a separate condition;

(d) any reference to an Australian or other standard, guideline, or code of practice in this licence:

(i) if dated, refers to that particular version; and

(ii) if not dated, refers to the latest version and therefore may be subject to change over time;

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

Infrastructure and equipment

1. The licence holder must ensure 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	Lime plant consisting of: • Kiln • Kiln raw feed, • Grinding plant • Conveyors, • Screen decks • Ducting, • Preheater Tower • Cyclone • Product silo with dust collectors • Cooler baghouse and • Preheater baghouse	(a) All baghouses and filters must be maintained in working condition free of leaks and build-up of a hard layer on the filter surfaces. (b) Spare filter bags for all baghouses must be kept on the premises. (c) All dust collection and control systems designed to remove dust from an air exhaust or emission point must be maintained to meet all particulate emission limits specified in condition 3. (d) All installed dust collection systems on the product silo must be maintained in working condition. (e) All installed cyclones(s) on the preheater tower must be maintained in working condition. (f) All coverings on the conveyors, screen decks and ducts must be maintained in working condition. (g) All gasses from lime manufacturing must pass through a baghouse.	As shown in Schedule 1, Figure 2 as Kiln and Ducting, Preheat Baghouse, Cooler baghouse, Product silo and dust collector, Preheater Tower/Cyclones
2	Kiln stack (A1) 65 magl Cooling stack (A2) 22 magl	(a) Dust sensor on each stack to be maintained in working condition. (b) All gasses from the preheater and cooler baghouse must be discharged to the environment through kiln stack A1 and cooling stack A2	As shown in Schedule 1, Figure 2, as Kiln stack A1 Cooling stack A2
3	Fuel, oil, other hydrocarbons, and chemical storage infrastructure	(a) Must be stored in a container with low permeability (10^{-9} metres per second or less). (b) Must be stored within self-bunded containers or bunded areas designed to hold not less than 110% of the volume of the largest storage container or inter-connected system, or 25% of the total volume of substances in the compound. (c) Bunded areas must be graded and or include a sump to allow recovery of liquid. (d) Must be stored in containers that are chemically resistant to the substance being stored. (e) Compounds associated with the transfer operations must have working valves, pumps, and meters. (f) Storage compounds must be designed such that jetting from storage containers or fitting must be captured within the bunded area (see Australian Standard 1940-1993 Section 5.93 (g)).	As shown in Schedule 1, Figure 2 as Decommissioned waste oil tank, Concrete bunded area for waste lubricants, ROM pad

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		(g) Storage compounds for chemicals which may react dangerously if they meet other chemicals or fuels in the same compound must be bunded separately. (h) All spills and leaks of fuel, oil, other hydrocarbon, and chemicals inside or outside compound(s) must be immediately collected and removed off site for liquid recycling and solids to be disposed of at a waste facility licensed to accept that waste type.	
4	Washdown hardstand,	(a) Fuel and oil traps must be installed and maintained within the vehicle washdown area. (b) Fuel and oil traps with captured detergents or solvents must be properly disposed of at a waste facility licensed to accept that waste type.	As shown in Schedule 1, Figure 2, as Truck washdown bay
5	Waste holding tanks, drains, bunding, and sumps.	(a) Mechanical workshop, laboratory and power generation areas must have installed and maintained bunding, drains and sealed collection sumps capable of recovering spillages. (b) All spillages contained within the bunds, drains, sealed collection sumps must be disposed of at a waste facility licensed to accept that waste type. (c) All collected waste lubricants and hydraulic fluids must be contained in holding tanks for recycling and disposed of at a waste facility licensed to accept that waste type.	As shown in Schedule 1, Figure 2, as Workshop, Electrical substation, Decommissioned waste oil tank, Concrete bunded area for waste lubricants
6	Settling ponds, silt traps and fuel/oil traps	(a) Settling ponds, silt traps and fuel/oil traps must be cleaned out and maintained to ensure the continued performance of the systems. (b) All material cleaned out from the settling ponds, silt traps and fuel/oil traps must be disposed of at a waste facility licensed to accept that waste type.	As shown in Schedule 1, Figure 2 as Silt trap Settling pond Oil trap
7	2x mobile sand screening plants	(a) Screens must only operate within sandpit 2, sandpit 3 and/or sandpit 4. (a) Screens must only operate between 6 am and 4 pm (b) Water carts with appropriate sprayers must be available on the premises for use in sandpits 2 and 3 or on haulage roads to reduce dust emissions when required. (c) Water sprayers must be installed and maintained within sandpit 4, capable of reducing dust from mobile screening and stockpiles. (d) Chemical dust suppression must be	As shown in Schedule 1, Figure 2 as 2 (sandpit 2) 3 (sandpit 3) and4 (sandpit 4)

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		available for use in stockpiles as required. (e) Aglime stockpiled in sandpit 4 must have molasses blended into the product before being stockpiled. (f) Maximum height of lime sand stockpiles in sandpits 2, 3 and 4 must be no greater than 2 metres below the lowest pit wall height respectively for each pit. (g) Maximum height of Aglime stockpiles in sandpit 4 must be no greater than 5 metres above ground level. (h) Before moving lime sand from each sandpit, lime sand must be tested for moisture content within a 72-hour period and have a moisture content of at least 2 %. (i) Repurposed material from the lime facility to produce Aglime, must pass through a 3-metre auger with an automated water outlet to prevent dust emissions before being transported to sandpit 4.	

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 height (magl)	Discharge point location
Particulate matter (TSP)	Kiln stack A1 and Cooling Stack A2	65.0 22.0	As shown in Schedule 1, Figure 2 as A1 and A2
Total Nitrogen Oxides and Nitrogen Dioxides (NOx)	Kiln stack A1	65.0	As shown in Schedule 1 Figure 2 as A1

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

Table 3: Emission and discharge limits

Discharge point	Parameter	Limit	Target
Kiln stack A1 and Cooling Stack A2	Particulate material (TSP)	[1]150 mg/m^3	N/A
Kiln stack A1	[2]Total Nitrogen Oxides and Nitrogen Dioxides (NOx)	<350 mg/m^3 at 7% oxygen	<150 mg/m^3 at 7 % oxygen

Notes
1. Expressed dry at 0 degrees Celsius and 1.0 atmosphere pressure (101.325 kilopascals). The addition of diluent gases must not be used to achieve compliance with the above emissions limit.
2. Discharge parameters provided in the table above are acceptable based on a lime kiln stack discharge volume of 30.5 m^3/s at 260 degrees Celsius.

4. The licence holder must ensure that all monitoring equipment used to comply with conditions 3 is operated and calibrated in accordance with the relevant required methodology, and is maintained to provide valid data for:

(a) greater than 90% of the measurement intervals in every calendar month, and

(b) greater than 95% of the measurement intervals over any 12 consecutive calendar months.

Monitoring

5. 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[1]	Frequency	Averaging period	Unit[2]	Method[2,3,4]
Kiln stack A1 As shown in Schedule 1 Figure 2	Volumetric flow rate	Annually	N/A	m^3/s	USEPA Method 2
	CO		60 minutes;	$\mu g/m^3$	USEPA Method 10
	NO_x				USEPA Method 7E
	O2		60 minutes	$\mu g/m^3$	USEPA Method 3A
	temperature			^0C	-
	Moisture content			m^3	USEPA Method 4
	Fuel feed rate and electrical power output over the duration of the test		60 minutes	kL and MW	-
	PM		60 minutes	mg/m^3	USEPA Method 5

Note 1: All units are referenced to STP Dry
Note 2: Concentrations to be corrected to STP at 7% oxygen on a dry basis
Note 3: Monitoring shall be undertaken to reflect normal operating conditions.
Note 4: Where any USEPA method refers to USEPA Method 1 for the sampling plane, this must be read as a referral to AS/NZS 4323.1:2001

6. The licence holder must record the results of all monitoring activity required by condition 5.

Records and reporting

7. 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.

8. 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.

9. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:

(a) the calculation of fees payable in respect of this licence;

(b) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;

(c) monitoring programmes undertaken in accordance with condition 5 of this licence; and

(d) complaints received under condition 7 of this licence.

10. The books specified under condition 9 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.

11. The licence holder must submit to the CEO by no later than 90 days after the end of each annual period and biennially from 31 April 2024, an Annual Environmental Report for that annual period for the conditions listed in Table 5, and which provides information in accordance with the corresponding requirement set out in Table 5.

Table 5: Annual Environmental Report

Condition	Requirement
-	(a) Brief background of production and processes including a current plan of the premises.
-	(b) A table showing: i. raw materials used (tonnes) for lime manufacturing. ii. the amount of material (tonnes) screened within the annual period. iii. all moisture content testing results including dates tested for movement

	of lime sand stockpiles.
5	(c) Laboratory data sheets for air monitoring in accordance with Table 4. (d) A tabulated data summary of monitoring results. (e) An interpretation of monitoring data results including comparison to historical trends and limits
-3, 4 and 12	(f) A summary of incidents, and exceedance of any limits, including actions taken to rectify the issues within the annual period.
7	(g) A summary of complaints recorded for the annual period.

12. The licence holder must, within 7 days of becoming aware of any non-compliance with conditions 1 and 3 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 6: have the meanings defined.

Table 6: 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 of each year.
AS4323.1	the Australian Standard AS 4323.1 Stationary Source Emissions Method 1 : Selection of sampling positions
averaging period	means the time over which a recorded monitoring result is obtained
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
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.
limit	in relation to a stack discharge means regulatory requirement not to be breached
magl	metres above ground level
mg/m^3	means milligrams per cubic metre, expressed dry at 0 degrees Celsius and 1.0 atmosphere pressure (101.325 kilopascals)

Term	Definition
mg/m^3 at 7% O_2	means milligrams per cubic metre, expressed dry at 0 degrees Celsius, 1.0 atmosphere pressure (101.325 kilopascals) and referenced to an oxygen concentration of 7 percent by volume
normal operating conditions	means any operation of a particular process (including abatement equipment) excluding start-up, shutdown and upset conditions, in relation to stack sampling or monitoring.
NO_X concentration at 7% O_2	Measured NO_X concentration x ([20.9% volume - 7.0% O_2 Concentration (% volume)] / [20.9% volume - Measured O_2 Concentration (% volume)])
NO_X	means the total combined amounts of nitrogen oxide and nitrogen dioxide
PM	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 Figure 1 in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
STD dry	means standard temperature and pressure (0°Celius and 101.325 kilopascals respectively), dry
target	in relation to a stack discharge means the stack discharge concentration that the works has been designed to achieve when optimally configured and operating under normal conditions (i.e.: excluding start-up, shut-down and other upset conditions)
USEPA Method 2	refers to the United States Environmental Protection Agency's Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)
USEPA Method 3a	refers to the United States Environmental Protection Agency's Method 3A: Determination of oxygen and carbon dioxide concentrations in emissions from stationary sources.
USEPA Method 4	refers to the United States Environmental Protection Agency's Method 4: Determination of moisture content in stack gases.
USEPA Method 5	refers to the United States Environmental Protection Agency's Method 5: Determination of particulate matter emissions from stationary sources.
USEPA Method 7E	refers to the United States Environmental Protection Agency's Method 7E: Determination of Nitrogen Oxide emissions from stationary sources.
USEPA Method 10	refers to the United States Environmental Protection Agency's Method 10: Determination of Carbon Monoxide Emissions from Stationary Sources
waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

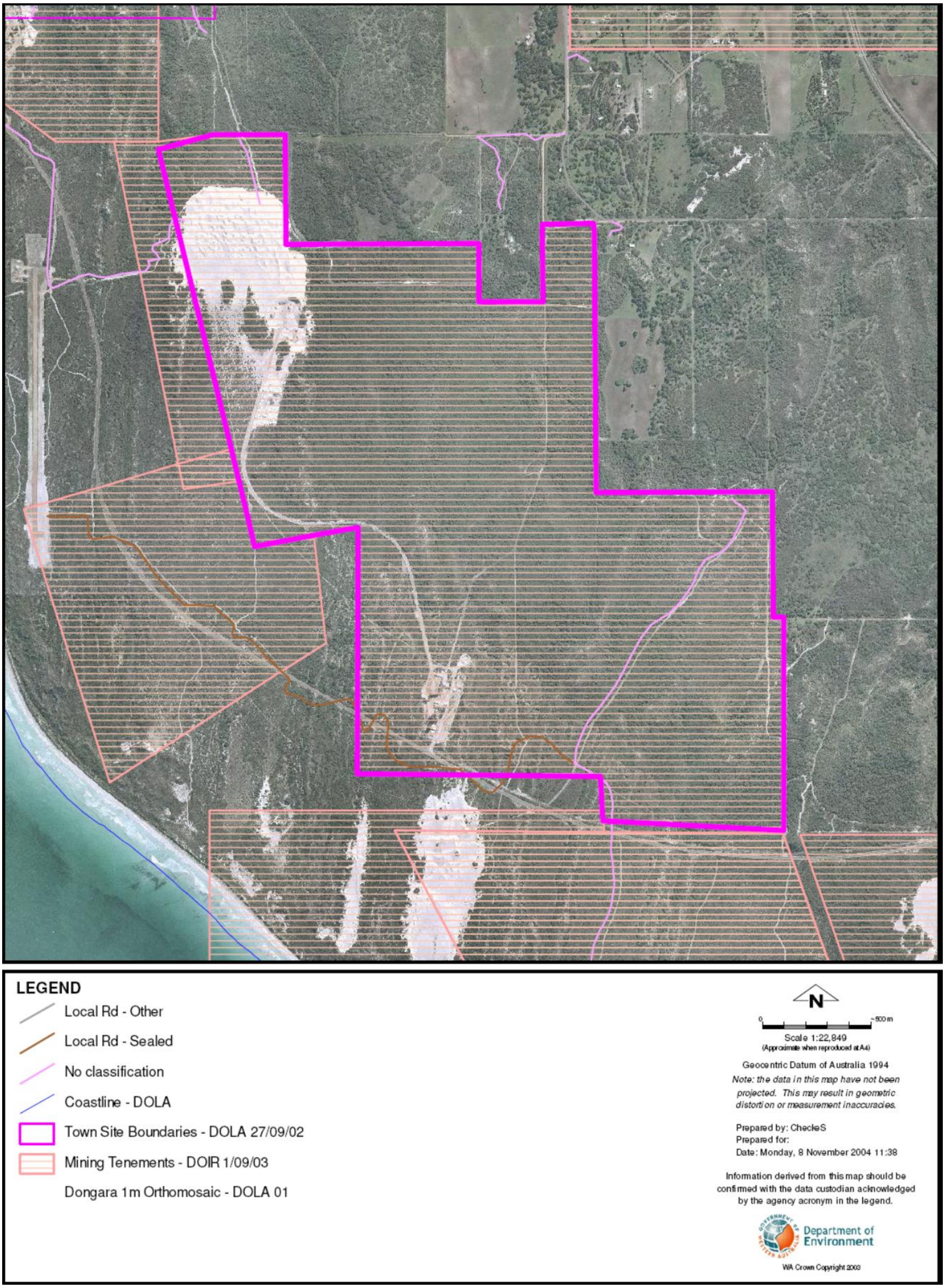

Figure 1: Map of the boundary of the prescribed premises

Site layout map

The layout of the prescribed premises is shown in the maps below (Figure 2)

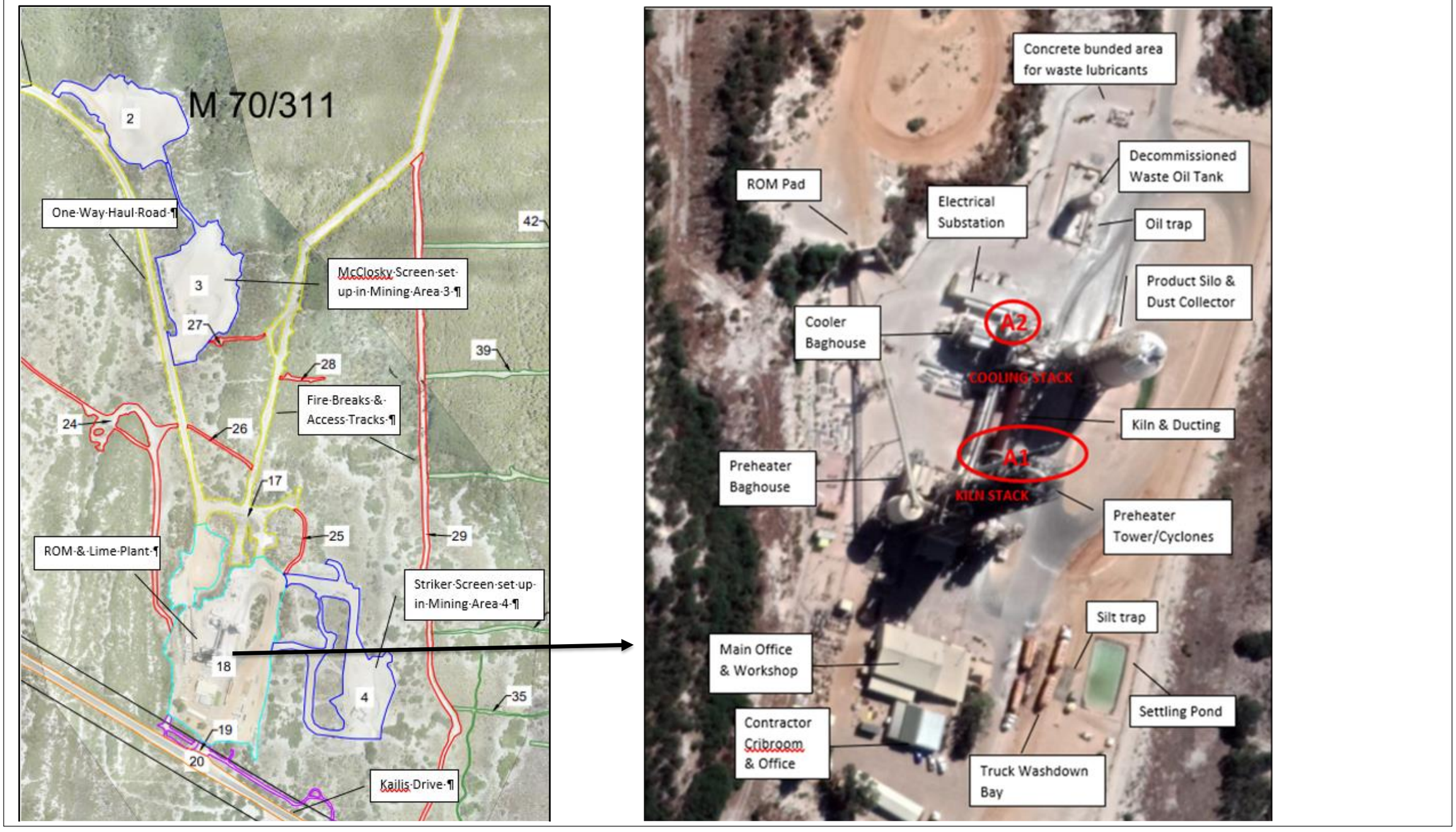

Figure 2: Map of the layout of the site and discharge points of the lime plant