



Works approval number W5835/2015/1

Works approval holder Iluka Resources Limited
ACN 008 675 018

Registered business address Level 17
240 St Georges Terrace
PERTH WA 6000

DWER file number DER2015/000690-1

Duration 20/08/2015 to 23/08/2021

Date of amendment 14/01/2020

Premises details North Capel Operations
Mining tenements M70/257, M70/962, M70/970,
M70/978, M70/990, M70/1082 and M70/1083 and part
of mining tenements M70/279 and M70/386
As defined by the coordinates in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 31: Chemical manufacturing: premises (other than premises within category 32) on which chemical products are manufactured by a chemical process	380,000 tonnes per annual period

This Amended Works Approval is granted to the Works Approval Holder, subject to the following conditions, on 14 January 2020, by:

Manager, Process Industries

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

Works Approval Conditions

1 General

1.1 Interpretation

1.1.1 In the Works Approval, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 In the Works Approval, unless the contrary intention appears:

‘Act’ means the *Environmental Protection Act 1986*;

‘annual period’ means the inclusive period from 1 January and ending on 31 December in the same year;

‘averaging period’ means the time over which a limit is measured or a monitoring result is obtained;

‘CEO’ means Chief Executive Officer of the Department of Water and Environmental Regulation;

‘CEO’ for the purpose of correspondence means:

Chief Executive Officer
Department Administering the *Environmental Protection Act 1986*
Locked Bag 10
JOONDALUP DC WA 6027
Telephone: (08) 6367 7000
Facsimile: (08) 6367 7001
Email: info@dwer.wa.gov.au

‘Commissioning’ means the process of operation and testing that verifies the works and all relevant systems, plant, machinery and equipment have been installed and are performing in accordance with the design specification set out in the works approval application;

‘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’ means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Works Approval;

‘Schedule 1’ means Schedule 1 of this Works Approval unless otherwise stated;

‘Works Approval’ means this Works Approval numbered W5835/2015/1 and issued under the Act;

‘Works Approval Holder’ means the person or organisation named as the Works Approval Holder on page 1 of the Works Approval.

1.1.3 Any reference to an Australian or other standard in the Works Approval means the relevant parts of the standard in force from time to time during the term of this Works Approval.

- 1.1.4 Any reference to a guideline or code of practice in the Works Approval means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guidelines or code of practice made during the term of this Works Approval.

1.2 General conditions

- 1.2.1 Subject to condition 1.2.2, the Works Approval Holder shall construct the works in accordance with the documentation detailed in Table 1.2.1:

Table 1.2.1: Construction Requirements ¹		
Document	Parts	Date of Document
Works Approval Application Form <i>Iluka Resources Limited North Capel Operations Synthetic Rutile Plant 1 (SR1) New Stack Works Approval Application Supporting Information April 2015, Rev 0</i>	All	21 April 2015

Note 1: Where the details and commitments of the documents listed in condition 1.2.1 are inconsistent with any other condition of this works approval, the conditions of this works approval shall prevail.

- 1.2.2 The Works Approval Holder shall construct the SR1 stack in accordance with the following requirements:
- (a) located at coordinates 368794mE and 6290960mN MGA Zone 50 GDA 1994 as depicted in Figure 1 and Figure 2 of Schedule 1; and
 - (b) the internal stack tip diameter is 1.9 m
- 1.2.3 The Works Approval Holder shall commission the Synthetic Rutile Plant 1 (SR1) New Stack for a period not exceeding 3 months.

2 Emissions

2.1 Point source emissions to air

- 2.1.1 The Licensee shall ensure that where waste is emitted to air from the emission point in Table 2.1.1 and identified on the map in Schedule 1 it is done so in accordance with the conditions of this Works Approval.

Table 2.1.1: Emission points to air			
Emission point reference	Emission Point	Emission point height (m)	Source, including any abatement
A14	New Stack	110	SR1 dryer exhaust gases, particulate wet scrubber SR1 kiln exhaust gases, thermo-oxidiser and particulate wet scrubber

3 Improvements

- 3.1.1 The Works Approval Holder shall complete the improvements in Table 3.1.1 by the date of completion in Table 3.1.1.

Table 3.1.1: Improvement program		
Improvement reference	Improvement	Date of completion
IR1	<p>The Works Approval Holder shall, prior to commencing commissioning of the Synthetic Rutile Plant 1 (SR1) New Stack submit a commissioning plan to the CEO. The commissioning plan shall include details relating to:</p> <ul style="list-style-type: none">(a) the expected timescales for commissioning;(b) the volume of material to be processed during commissioning;(c) expected emissions and discharges during commissioning and the environmental implications of the emissions;(d) how emissions and discharges will be managed during commissioning;(e) the monitoring that will be undertaken during the commissioning period;(f) how accidents or malfunctions will be managed;(g) start up and shut down procedures; and(h) reporting proposals including accidents, malfunctions and reporting against the commissioning plan. <p>Commissioning shall be carried out in accordance with the commissioning plan.</p>	3 months prior to commissioning

4 Information

4.1 Reporting

- 4.1.1 The Works Approval Holder shall submit a compliance document to the CEO, following the construction of the works and prior to commissioning of the same.
- 4.1.2 The compliance document shall:
- (a) certify that the works were constructed in accordance with the conditions of the works approval; and
 - (b) be signed by a person authorised to represent the Works Approval Holder and contain the printed name and position of that person within the company.
- 4.1.3 The Works Approval Holder shall submit a commissioning report for the Synthetic Rutile Plant 1 (SR1) New Stack to the CEO within 3 months of the completion of commissioning.

4.1.4 The Works Approval Holder shall ensure the report includes:

- (a) a list of any original monitoring reports submitted to the Licensee from third parties for the commissioning period;
- (b) a summary of the environmental performance of the North Capel Operations SR1 New Stack as installed, against the design specification set out in the works approval application;
- (c) a review of performance against the works approval conditions; and
- (d) where they have not been met, measures proposed to meet the design specification and/or works approval conditions, together with timescales for implementing the proposed measures.

4.2 Notification

4.2.1 The Works Approval Holder shall ensure that the parameters listed in Table 4.2.1 are notified to the CEO and are in accordance with the notification requirements of the table.

Table 4.2.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement	Format or form
1.2.3	Commencement of commissioning	7 days prior to start	None specified
	Completion of commissioning	7 days after completion	

Schedule 1: Maps

Premises map

The Premises boundaries are shown in the map below.

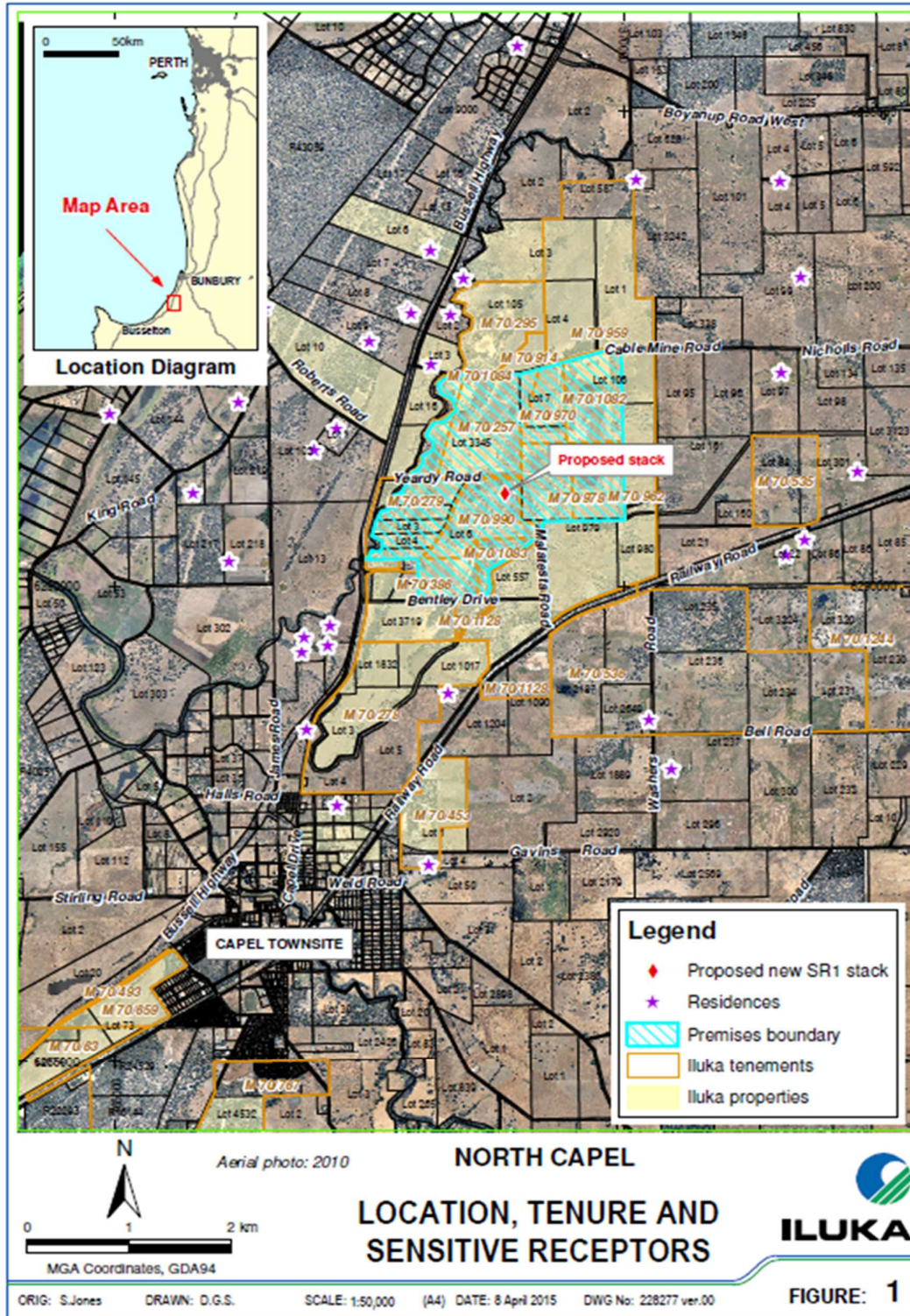


Figure 1 Stack Location map

SR1 Stack and Coordinates - 368794mE and 6290960mN MGA Zone 50 GDA 1994.

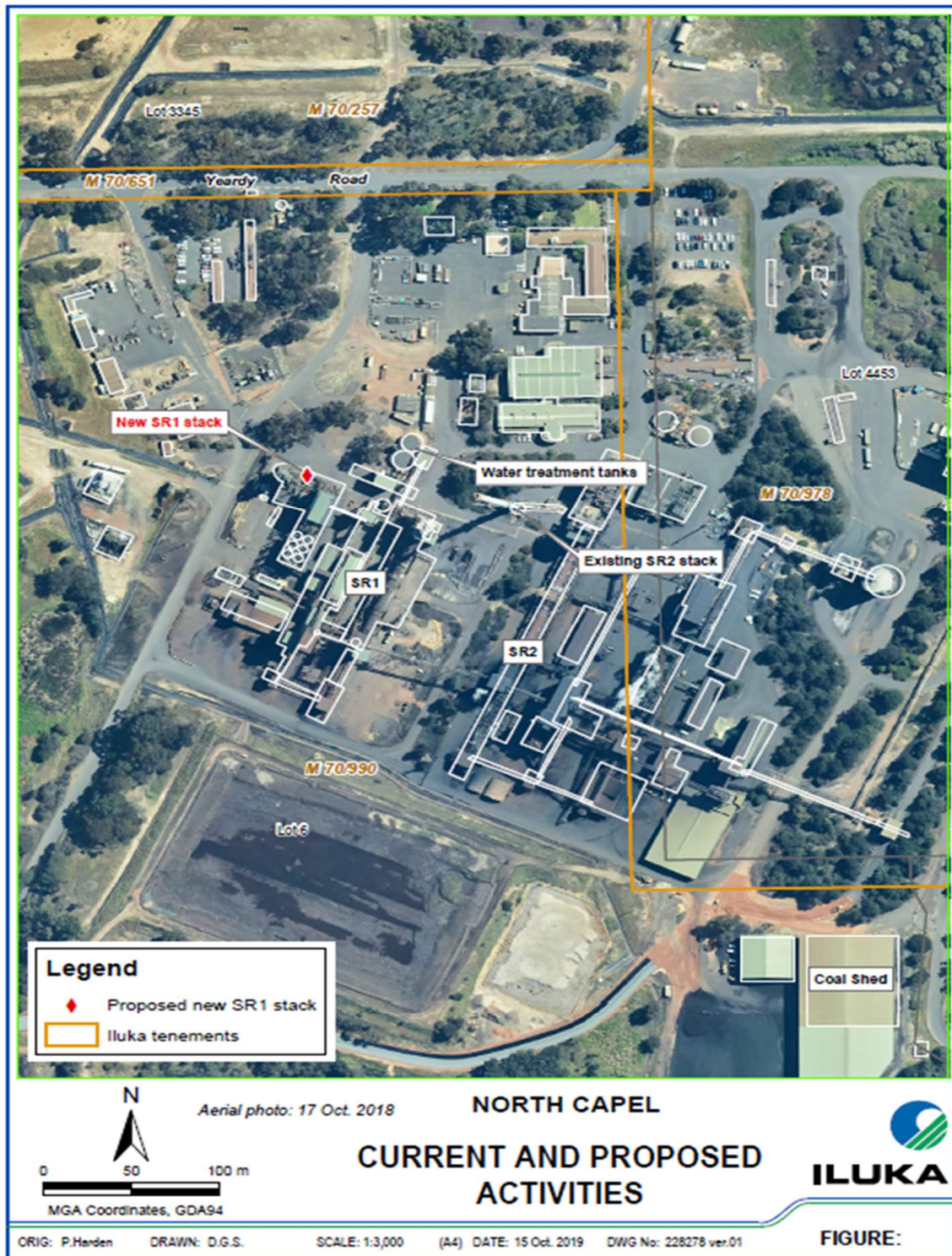


Figure 2: Technical drawing SR1 Stack

