Environmental Protection Act 1986

LICENCE NUMBER: L6129/1987/12 FILE NUMBER: 2010/002667-1

#### **PREAMBLE**

### **Applicability**

This licence is issued to Iluka Resources Limited for the Narngulu Synthetic Rutile Plant located at Lot 9 on Diagram 64009, Lot 34 on Diagram 66647 and Lot 151 on Diagram 78655, Goulds Road, Narngulu, WA, 6532 as depicted in Attachment 1. The Plant is a prescribed premises within Schedule 1 of the *Environmental Protection Regulations 1987* (as amended) as outlined in Table 1, and includes the following operations:

- In the first stage of the process; the iron content of ilmenite is changed to its metal form by the combined action of high temperatures and the gases of burning coal, producing reduced ilmenite; and
- The second stage of the process is where the reduced ilmenite is subjected to a leaching process to remove the metallised iron.

Table 1: Category under which the Narngulu Synthetic Rutile Plant operation is prescribed.

	Category name	Description
number		
31	Chemical manufacturing	Premises (other than Premises within category 32) on which chemical products are manufactured by a chemical process.

#### **Nominal Rated Throughput**

The nominal rated throughput of the premises covered by this licence is in accordance with the following:

Total quantity of ilmenite feed:
 390 000 tonnes per annum; and

Total quantity of synthetic rutile produced: 260 000 tonnes per annum

#### Other legal requirements

The licensee should be aware that these conditions do not exempt the premises/licensee from other statutory obligations under the *Environmental Protection Act 1986*, or any other Acts.

#### **Emergency, Accident or Malfunction**

The licensee should inform the CEO as soon as practicable of the identification of any discharge of waste which has occurred as a result of an emergency, accident or malfunction, or extreme weather conditions, otherwise than in accordance with any condition of this licence, and has caused or is likely to cause pollution.

#### **Alteration to Premises**

Prior to making any significant alterations to the premises which may affect the air, water or noise emissions from the premises, the licensee must submit a proposal to the CEO accompanied by supporting information and plans which will allow the environmental impact of that change to be assessed.

#### **General Requirements**

The following statements reflect important sections of the *Environmental Protection Act 1986* and are included for the information of the licensee:

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- The licensee should take all reasonable and practicable measures to prevent pollution of the environment.
- The licensee should ensure that all noise emissions from operations on site comply with the *Environmental Protection (Noise) Regulations 1997.*
- The licensee should take all reasonable and practicable measures to prevent or minimise the discharge of waste and the emission of noise, odours or electromagnetic radiation from the premises.
- The licensee should inform the CEO at least 24 hours prior to the commencement of any planned non-standard operations, which may have the potential to cause pollution.

#### **CONDITIONS OF LICENCE**

#### **DEFINITIONS**

In these conditions of licence, unless inconsistent with the text or subject matter:

"advise" means advise in writing from time to time;

"approved" or "approval" means approved or approval in writing from time to time;

"contaminated stormwater" means stormwater contaminated by on-site processes;

"Department" means the Department of Environment Regulation;

"CEO" means Chief Executive Officer of the Department of Environment Regulation;

"CEO" for the purpose of correspondence means:

Chief Executive Officer
Department Administering the Environmental Protection Act 1986
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au

"g/s", "mg/m<sup>3</sup>" and " $\mu$ g/m<sup>3</sup>" means grams per second, milligrams per cubic metre and micrograms per cubic metre respectively, expressed as dry at 0 degrees Celsius and 1.0 atmosphere pressure (101.325 kilopascals);

"inspector" means a person appointed as an Inspector under Section 88 of the *Environmental Protection Act 1986*:

"NATA" means the National Association of Testing Authorities;

'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;

"Pa" means Pascals of pressure;

"PM<sub>10</sub>" means any particulate matter with a diameter less than or equal to 10 microns; and

"TSP" means the total number of particles of solid or liquid matter - such as soot, dust, aerosols, fumes and mist - found in a sample of ambient air.

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#### **GENERAL CONDITIONS**

#### **ACCESS TO CONDITIONS**

G1 The licensee shall ensure that a copy of these conditions of licence is kept in the plant control room at all times.

#### DISCHARGE POINTS

- G2 The licensee shall ensure that gaseous wastes from the premises which cause or are likely to cause pollution shall only be discharged to the environment in the following ways:
  - (i) major gaseous wastes produced during normal plant operation through the kiln exhaust stacks, aeration plant stacks or the leach gas scrubber exhaust stack.
  - (ii) gaseous wastes arising from kiln shutdowns due to plant maintenance or equipment failures necessitating emergency venting operations, may be discharged through the kiln maintenance stacks.

#### REPORTING EXCEEDANCE OF LICENCE LIMITS

G3 The licensee shall inform the CEO as soon as is practicable, when any monitoring data or other collected data required by any condition of this licence indicates that an emission limit or discharge limit, specified in any condition of this licence, may have been exceeded.

#### COMPLAINTS REGISTER

- G4(a) The licensee shall maintain a register of all complaints received directly by the licensee relating to the possible emissions of noise or any wastes from the premises.
- G4(b) When receiving each complaint, the licensee shall make all reasonable efforts to obtain the following information for recording on the register, as requested by G4(a) of these conditions:
  - (i) date and time of the complaint;
  - (ii) date and time of the waste or noise emission:
  - (iii) name of the complainant;
  - (iv) contact telephone number of the complainant; and
  - (v) location of the alleged incident.
- G4(c) As soon as practicable following the receipt of each complaint relating to odorous gaseous emissions, the licensee shall include the following information on the register, for the period of 1 hour prior to the time of the alleged odour up to the time of the alleged odour:
  - (i) which plants (C or D) were in operation at the time of the incident;
  - (ii) status of the maintenance stacks (open or closed);
  - (iii) kiln feed rate;
  - (iv) quality of feed used;
  - (v) number of vessels in use in the aeration circuit; and
  - (vi) any plant malfunction which may have resulted in excessive discharges of odorous emissions,

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- G4(d) When taking into account the information required in part G4(c) of this condition and any other relevant factors, the licensee shall indicate whether, in the opinion of the licensee, the premises may have been the cause of the alleged odour.
- G4(e) The licensee shall include a copy of the Complaints Register in the Annual Environmental Report, as specified in condition G5, where the register shall be certified as a true and correct representation of the event by the signature of an authorised officer of the licensee together with the printed name and position of that person within the company.

#### REPORTING REQUIREMENTS

- G5(a) The licensee shall provide to the CEO, an Annual Environmental Report by **15**March each year. The Annual Environmental Report shall contain the monitoring data and other collected data required by any condition of this licence from 1 January to 31 December each year. A summary table of any exceedances reported under condition G3 shall also be included.
- G5(b) The licensee shall ensure that the report provides information on the characteristics, volume and effects of its discharges to the environment and on the characteristics of the receiving environment within the vicinity of the premises (e.g. air quality, surface and groundwater quality). An assessment of the information against previous monitoring results, licence limits or other appropriate measures (e.g. standards or guidelines) shall be made.
  - G6 The licensee shall by **15 March** in each year, provide to the CEO, an Annual Audit Compliance Report in the form in Attachment 3 to this licence, signed and certified in the manner required by Section C of the form, indicating the extent to which the licensee has complied with the conditions of this licence, and any previous licence issued under Part V of the Act for the premises, during the period beginning 1 January the previous year and ending on 31 December in that year.

#### **AIR POLLUTION CONTROL CONDITIONS**

#### STACK SAMPLING PORTS, PLATFORMS ACCESS WAYS

A1 The licensee shall maintain emission sampling ports, platforms and access ways on the kiln stack(s) of the waste gas treatment system.

#### WASTE GAS TREATMENT SYSTEM - EMISSION LIMITS

- A2(a) The licensee shall ensure that, during normal operation, exhaust gases from each of Plants C and D shall be ducted through a separate waste gas treatment system consisting of dust collection cyclones, a thermal oxidiser (afterburner) and a wet venturi rod dust scrubber.
- A2(b) The licensee shall release scrubbed gases into the environment in the following ways:
  - (i) scrubbed gases from Plant C are to be released through a kiln stack of height 49 metres above local ground level; and
  - (ii) scrubbed gases from Plant D shall be released through a kiln stack of height 57 metres above local ground level.
- A2(c) The licensee shall ensure that the concentration of particulates in the exit gases from the kiln stack serving each plant shall not exceed **250 mg/m**.

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A2(d) The licensee shall not rely on the addition of diluent gases to achieve compliance to the limit specified in part A2(c) of this condition.

#### STACK TESTING

- A3(a) The licensee shall conduct a valid source test for sulphur dioxide, hydrogen sulphide and particulates emitted from each stack.
- A3(b) The licensee shall ensure that the source test referred to in part (a) of this condition shall be carried out at least once during every three-month period, commencing on 1 January, 1 April, 1 July and 1 October each year.
- A3(c) The licensee shall conduct a valid source test for volatile organic compounds and semi-volatile organic compounds emitted from each stack on an annual basis.
- A3(d) The licensee shall include the results of each set of source tests in the Annual Environmental Report along with the following information:
  - (i) associated plant production rate,
  - (ii) coal feed rate over the duration of the test;
  - (iii) moisture content;
  - (iv) volume flow rate;
  - (v) temperature;
  - (vi) sulphur dioxide, hydrogen sulphide and particulates concentrations; and
  - (vii) any other information relevant to an interpretation of the emissions limits.
- A3(e) The licensee shall ensure that all and any monitoring results supplied to the CEO shall be certified as a true and correct representation of the nature of the discharge into the receiving environment, by the signature of an authorised officer of Iluka Resources Limited, together with the printed name and position of that person within the company.

#### OPENING OF MAINTENANCE STACK

- A4(a) The licensee shall ensure that the maintenance stacks remain closed and sealed at all times during operations.
- A4(b) The licensee shall maintain a permanent log of maintenance stack openings, which contains the following information:
  - (i) time and date;
  - (ii) the reasons for opening the stack;
  - (iii) the duration of the stack opening; and
  - (iv) the time at which the kiln feed was ceased.

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- A4(c) The licensee shall include in the log, referred to in part A4(b) of this condition, the corrective action taken or planned to be taken for each event, along with the following information:
  - (i) the actions taken to avoid a repetition of any malfunction that may have been the reason for the opening of the maintenance stack; and/or
  - (ii) plans taken to minimise the adverse environmental consequences of any similar re-occurrence.
- A4(d) The licensee shall collect the data referred to in part A4(c) of this condition over a 12-month period and include this data in the Annual Environmental Report, as required by condition G5.
- A4(e) The licensee shall ensure that each page of the log supplied to the CEO shall be certified as a true and correct representation of the nature of the events surrounding the opening of the maintenance stack, by the signature of an authorised officer of Iluka Resources Limited together with the printed name and position of that person within the company.

#### ODOUR CONTROL

- A5(a) The licensee shall ensure that all kiln generated odorous gases pass through a purpose-built thermal oxidiser prior to discharge to the atmosphere.
- A5(b) The licensee shall ensure that, while kiln feed is occurring, the residence time of the gas stream within the thermal oxidiser is not less than 0.3 seconds and the temperature within the thermal oxidiser shall be maintained at not less than 760 degrees Celsius.
- A5(c) The licensee shall ensure that a thermocouple is maintained in the after-burner at a location whereby the temperature of the incinerated off-gases, after they have been retained in the after-burner chamber according to part (b) of this condition, can be measured.
- A5(d) The licensee shall ensure that the temperature of the thermal oxidiser is measured using the thermocouple, and the results continuously recorded on the Distributed Control System.
- A5(e) The licensee shall ensure that free oxygen is maintained in the gas stream exiting the thermal oxidiser.
- A5(f) The licensee shall ensure that the percentage of free oxygen in the gases exiting the thermal oxidiser is measured and continuously recorded on the Distributed Control System.
- A5(g) The licensee shall ensure that the Distributed Control System record is marked with the correct date and time when the thermal oxidiser is starting up and shutting down, and at least daily during continuous operation.
- A5(h) The licensee shall retain the Distributed Control System record on the premises for a minimum of 3 months and make the record available at all times for viewing by an Inspector.

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#### KILN INSTABILITY

- A6(a) The licensee shall notify the CEO within 12 hours of the event, if kiln pressure instability is likely to result in **an exceedance of 400 Pa** during the following occasions:
  - (i) on more than 3 occasions in any 1 hour period; or
  - (ii) more than 8 occasions in any 24 hour period; outside of any previously reported period.
- A6(b) The licensee shall ensure that the notification, as required by part A6(a) of this condition, includes the following:
  - (i) time and date of the exceedance;
  - (ii) the reason for the kiln instability;
  - (iii) the frequency and length of time of the kiln pressure events in excess of 400 Pa;
  - (iv) a copy of the Distributed Control System record for the period of the kiln instability which show clear levels of kiln pressure, afterburner temperature, percentage of free oxygen in the gases exiting the afterburner, and the load, measured in amps, on the ID fans; and
  - (v) the wind speed and direction during the period of kiln instability.

#### **DUST - GENERAL REQUIREMENT**

- A7(a) The licensee shall take all reasonable and practicable measures to prevent the generation of dust from all materials handling operations, stockpiles, open areas and transport activities.
- A7(b) The licensee shall employ routine maintenance and housekeeping practices to ensure that there is no accumulation of waste materials in or around the premises which may lead to the generation of visible dust.

#### **DUST MONITORING REQUIREMENTS**

- A8(a) The licensee shall use measures outlined in the document **Dust Management Plan Narngulu Operations Rev B (2008)** to control and monitor ambient dust levels at the boundary of the premises.
- A8(b) The licensee shall report the results of the dust monitoring program completed in accordance with part A8(a) of this condition in  $\mu g/m^3$  and include the results in the Annual Environmental Report, as required by condition G5.

#### WATER POLLUTION CONTROL CONDITIONS

#### LIQUID WASTE PONDS

- W1(a) The licensee shall contain all process-derived wastes and process liquors within impervious holding facilities.
- W1(b) The licensee shall ensure that a minimum freeboard of 500mm is maintained on the impervious waste ponds and tanks in order to prevent overtopping.

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#### WATER MONITORING PROGRAM AND REPORTING

W2(a) The licensee shall take representative water samples from the following monitoring sites at the frequencies stated, and have the samples analysed for the parameters listed below:

Monitoring sites	Sampling Frequency	Parameters to be measured
Monitoring Bores: 1-3, 4D, 4S, 5-9,17-21, 23, 25-31, 34-42, 45a and 46-50 (as per Attachment 2).	Quarterly	pH; *standing water level (SWL); total dissolved solids (TDS); boron (B), calcium (Ca), chlorine (Cl), iron (Fe), magnesium (Mg), sodium (Na), ammonium (NH <sub>4</sub> -N), chloride (Cl) and sulphate (SO <sub>4)</sub> .
Surface Water Locations: Stormwater dams 2, 3 and 4.	At least once per year when surface water is present.	pH, Fe, manganese (Mn), Ca, Mg, Na, SO4, Cl, TDS, and total hydrocarbons.

<sup>\*</sup>SWL shall be determined prior to collection of water samples

- W2(b) The licensee shall collect all water samples in accordance with Australian Standard AS/NZS 5667.1:1998.
- W2(c) The licensee shall submit all water samples to a laboratory with current NATA accreditation for the analysis specified.
- W2(d) The licensee shall include all results of the tests described in part W2(a) to W2(c) of this condition in the Annual Environmental Report, where the results shall be presented in graphical form so that comparisons with previous years' data can be assessed.

#### CONTAMINATED STORMWATER

W3 The licensee shall ensure that contaminated stormwater is retained on the premises.

#### LIQUID CHEMICAL STORAGE

W4(a) The licensee shall store environmentally hazardous chemicals including fuel, oil or other hydrocarbons where the total volume of each substance stored on the premises exceeds 1000 litres, within low permeability (10 metres per second or less) compound(s) designed to contain not less than 110% of the volume of the largest storage vessel or inter-connected system, and at least 25% of the total volume of substances stored in the compound.

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- W4(b) The licensee shall ensure that the compound(s) described in part W4(a) to this condition shall:
  - (i) be graded or include a sump, to allow recovery of liquid;
  - (ii) be chemically resistant to the substances stored;
  - (iii) include valves, pumps and meters associated with transfer operations wherever practical. Otherwise the equipment shall be adequately protected (e.g. bollards) and contained in an area designed to permit recovery of chemicals released following accidents or vandalism;
  - (iv) be designed such that jetting from any storage vessel or fitting will be captured within the bunded area [see for example Australian Standard 1940-2004 Section 5.8.3 (h)]:
  - (v) be designed such that chemicals which may react dangerously if they come into contact, are in separate bunds in the same compound or in different compounds; and
  - (vi) be controlled such that the capacity of the bund is maintained at all times (e.g. regular inspection and pumping of trapped uncontaminated rainwater).
- W4(c) The licensee shall immediately remove and either reuse or dispose of, to a licensed landfill any liquid resulting from spills or leaks of chemicals including fuel, oil or other hydrocarbons, whether inside or outside low permeability compound(s).
- W4(d) The licensee shall ensure that the total volume of hydrocarbons (not exceeding 500 litres) stored in the fuel tanks associated with each of the mobile field pump facilities, are located so that in the event of spills or leaks; hydrocarbons;
  - (i) do not drain into a water body or natural drainage line;
  - (ii) are immediately contained, recovered, and disposed of; and
  - (iii) contaminated soil from the site is remediated.

#### VEHICLE WASHDOWN AREAS AND ANCILLARY OPERATIONS

- W5(a) The licensee shall ensure that vehicle washdown areas are equipped with fuel/oil traps and provisions are taken to ensure detergent or solvent contaminated waters are not discharged to the environment.
- W5(b) The licensee shall maintain protective bunding, skimmers, silt traps, neutralisation pits, fuel and oil traps, drains and sealed collection sumps around the process plant, maintenance workshops, laboratory and power generation areas to enable recovery of spillages and protection of surrounding soils and groundwater, where collected material shall be disposed of either to the tailings storage facilities or by export offsite to a licensed landfill.
- W5(c) The licensee shall collect waste lubricants and hydraulic fluids in suitable holding tanks where the collected material shall be disposed of by export off-site to a licensed landfill or recycled.

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#### **SOLID WASTE CONTROL CONDITIONS**

#### **DISPOSAL OF WASTES**

- S1 The licensee shall ensure that solid wastes on the premises, which cause or are likely to cause pollution, shall only be disposed off to the environment in the following ways:
  - (i) transported in a dry form to the lined waste ponds;
  - (ii) by pump in slurry form to the lined waste ponds; or
  - (iii) all non-production wastes to be disposed of off-site to an approved landfill.

.....

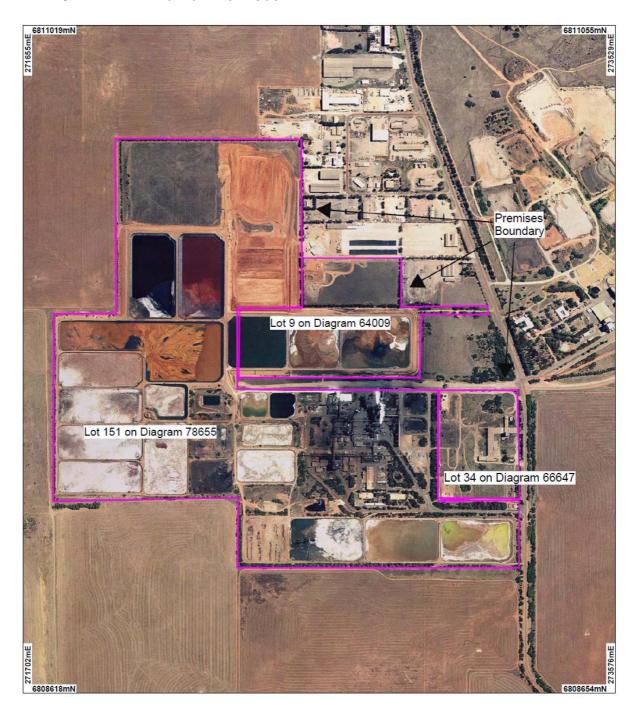
Jonathan Bailes
Manager Licensing (Process Industries)
Officer delegated under Section 20
of the Environmental Protection Act 1986

Date of Issue: Thursday, 1 August 2013

Environmental Protection Act 1986

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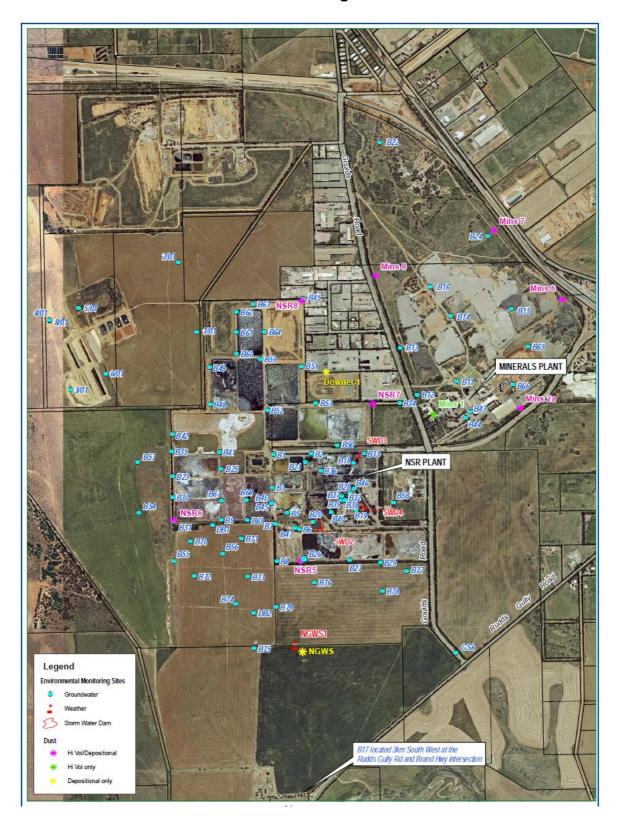
**ATTACHMENT 1: Plan of Premises.** 



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### **ATTACHMENT 2: Environmental Monitoring Sites.**



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### **Attachment 3: Reporting & notification forms**

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

### ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

### **SECTION A**

#### LICENCE DETAILS

LICENCE DE I AILO		
Licence Number:		Licence File Number:
Company Name:		ABN:
Trading as:		
Reporting period:		
	to	
STATEMENT OF COMPLIANCE W  1. Were all conditions of the Licence appropriate box)		
		Yes   Please proceed to Section (
		No ☐ Please proceed to Section I
Each page must be initialled by the propert (AACR).	person(s) who signs Section C	C of this Annual Audit Compliance
Initial:		

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### **SECTION B**

#### DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use a separate page for each Licence condition that was not complied with.			
a) Licence condition not complied with:			
b) Date(s) when the non compliance occurred, if applicable:			
c) Was this non compliance reported to DER?:			
Yes Reported to DER verbally	□ No		
Date			
Reported to DER in writing			
Date			
d) Has DER taken, or finalised any action in relation to the non com	npliance?:		
e) Summary of particulars of the non compliance, and what was the	e environmental impact		
e) Summary of particulars of the non-compliance, and what was the	e environmental impact.		
f) If relevant, the precise location where the non compliance occurr	ed (attach map or diagram):		
g) Cause of non compliance:			
h) Action taken, or that will be taken to mitigate any adverse effects	s of the non compliance:		
i) Action taken or that will be taken to prevent recurrence of the nor	n compliance:		
Each page must be initialled by the person(s) who signs Section C o	of this AACR		
Initial:			

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### **SECTION C**

### SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) may only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is		The Annual Audit Compliance Report must be signed and certified:		
An individual		by the individual licence holder, or by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.		
A firm or other unincorporated company		by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.		
		by affixing the common seal of the licensee in accordance with the Corporations Act 2001; or		
		by two directors of the licensee; or by a director and a company secretary of the licensee, or		
A corporation		if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or		
		by the principal executive officer of the licensee; or		
		by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.		
A public outbority		by the principal executive officer of the licensee; or		
A public authority (other than a local government)		by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.		
a local government		by the chief executive officer of the licensee; or		
a local government		by affixing the seal of the local government.		

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of \$50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE:	SIGNATURE:
NAME: (printed)	NAME: (printed)
POSITION:	POSITION:
DATE:/	DATE:/
SEAL (if signing under seal)	



### **Decision Document**

### Environmental Protection Act 1986, Part V

Proponent: Iluka Resources Limited

**Licence Number: L6129/1987/13** 

Registered office: Level 23, 140 St Georges Terrace

PERTH WA 6000

**ACN:** 008 675 018

Premises address: Narngulu Synthetic Rutile Plant

Lot 9 on Diagram 64009, Lot 34 on Diagram 66647 and Lot 151 on

Diagram 78655 Goulds Road

NARNGULU WA 6532

Issue date: Thursday, 1 August 2013

Commencement date: Monday, 9 September 2013

**Expiry date:** Saturday, 8 September 2018

#### **Decision**

Based on the assessment detailed in this document the Department of Environment Regulation (DER) has decided to amend a licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Clint Joseph

Licensing Officer

Decision Document authorised by: Jonathan Bailes

**Delegated Officer** 

Amendment date: Thursday, 18 March 2016

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IRLB\_TI0669 v2.7



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5	Advertisement and consultation table	6
6	Risk Assessment	6

### 1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

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IRLB\_TI0669 v2.7



### 2 Administrative summary

Administrative details	
Application type	Works Approval  New Licence  Licence amendment  Works Approval amendment
Activities that cause the premises to become	Category number(s)  Assessed design capacity
prescribed premises	31 – Chemical manufacturing 390 000 tpa
Application verified	Date: N/A
Application fee paid	Date: N/A
Works Approval has been complied with	Yes□ No□ N/A⊠
Compliance Certificate received	Yes□ No□ N/A⊠
Commercial-in-confidence claim	Yes No
Commercial-in-confidence claim outcome	N/A
Is the proposal a Major Resource Project?	Yes□ No⊠
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the Environmental Protection Act 1986?	Yes No⊠ Referral decision No:  Managed under Part V  Assessed under Part IV □
Is the proposal subject to Ministerial Conditions?	Yes⊠ No□ Ministerial statement No:088 EPA Report No: 410
Does the proposal involve a discharge of waste	Yes□ No⊠
into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i> )?	Department of Water consulted Yes ☐ No ☒
Is the Premises within an Environmental Protection	n Policy (EPP) Area Yes□ No⊠
Is the Premises subject to any EPP requirements?	Yes□ No⊠.

Environmental Protection Act 1986 Decision Document: L6129/1987/13 File Number: 2010/0002667



### **Executive summary of proposal and assessment**

The Narngulu Synthetic Rutile Plant (NSR Plant) is licenced to process up to 390,000 tonnes of ilmenite per year. The NSR Plant is designed to upgrade ilmenite containing approximately 60% titanium dioxide (TiO<sub>2</sub>) to approximately 90% TiO<sub>2</sub>. Iron and other impurities are removed to produce various grades of either Synthetic Rutile or Synthetic-Enhanced Product.

The NSR Plant was idled in December 2012 in response to market conditions and remains in care and maintenance. While the NSR Plant is idled, the lime plant and water treatment circuit remain in operation along with RD4, RD7 and SD8 Tailings Storage Facilities (TSFs) for the treatment and disposal of Mineral Separation Plant (MSP) process waste. Rehabilitation and closure works are underway within the TSF area.

This amendment is for the removal of conditions A9(a) to (c). These conditions refer monitoring of meteorological data for the NSR Plant.

DER has considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous licence was granted. No significant changes have occurred, and the plant remains in care and maintenance. Therefore, DER has not amended conditions relating to emissions and discharges.

Environmental Protection Act 1986 Decision Document: L6129/1987/13 Amendment date: Thursday, 18 March 2016

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### 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABL	Е		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
DUST - GENERAL REQUIREMENT	A7(a)	Condition A7(a) has been amended to remove the reference to visible dust crossing the boundary of the premises. This requirement is not clear or enforceable. The requirement to take all reasonable and practicable measures to prevent the generation of dust from all materials handling operations, stockpiles, open areas and transport activities remains.	N/A
WATER MONITORING PROGRAM AND REPORTING	W2(c)	Condition W2(c) has been amended to remove the reference to the 'Standard Methods for Examination of Water and Wastewater-APHA-AWWA-WEF'. This standard is no longer used by DER. The requirement to use a NATA accredited laboratory remains.	N/A
ONGOING METEOROLOG ICAL DATA MONITORING PROGRAM	A9(a) to A9(c)	Conditions A9(a) to (c) have been removed from the licence. The NSR Plant was idled in December 2012 and is not expected to process in the near future. The Bureau of Meteorology (BoM) operates a weather station located in close proximity to the premises (2.2km from the MSP and 3km from the NSR Plant) that will be used to provide data if and when operations restart. The BoM station will provide more accurate and more reliable data, which can be accessed in the public domain.	Application supporting documentation

Amendment date: Thursday, 18 March 2016



#### Advertisement and consultation table 5

Date	Event	Comments received/Notes	How comments were taken into consideration
16/03/2016	Licensee sent a copy of the draft amended licence	No comments.	N/A

### **Risk Assessment**

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

**Table 1: Emissions Risk Matrix** 

Likelihood	Consequence				
	Insignificant Minor Moderate Major				Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High

Amendment date: Thursday, 18 March 2016