



**Licence Number** L5425/1989/13

**Licence Holder** Iluka Eneabba Pty Ltd  
**ACN** 654 432 541

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

**File Number** INS-0001205

**Duration** 04/12/2020 to 03/12/2040

**Date of Issue** 04/12/2020

**Date of Transfer** 17/02/2026

**Premises Details** Narngulu Operations  
249 Goulds Road  
NARNGULU WA 6532

Legal description -

Lot 2 on Plan 11238, Lot 202 on Plan 59617, Lot 9 (part of) on Diagram 64009, Lot 151 on Diagram 78655, Lot 34 on Diagram 66647, Lot 33 on Diagram 62983, Lot 55 on Diagram 82363

As defined by the coordinates in Schedule 2 of the revised licence

| <b>Prescribed premises category description</b><br>(Schedule 1, <i>Environmental Protection Regulations 1987</i> ) | <b>Assessed production / design capacity</b> |
|--|--|
| Category 8 – Mineral sands mining and processing   | 1,200,000 tonnes per annual period           |

This licence is granted to the licence holder, subject to the attached conditions, on 17 February 2026, by:

**MANAGER, RESOURCE INDUSTRIES**

**STATEWIDE DELIVERY (ENVIRONMENTAL REGULATION)**

Officer delegated under section 20 of the *Environmental Protection Act 1986*

## Licence history

The licences and works approvals issued for the premises prior to issue of this licence are:

| Instrument log |            |   |
|----------------|------------|---|
| Instrument     | Issued     | Description   |
| L5425/1989/10  | 23/08/2007 | Licence renewed – issued for 5 years  |
| L5425/1989/11  | 31/08/2012 | Licence renewed – issued for 5 years  |
| L5425/1989/11  | 20/06/2017 | Amendment Notice 1 – extend expiry date by 12 months  |
| L5425/1989/11  | 19/03/2018 | Amendment Notice 2 – approval to dispose asbestos-contaminated material and NORM in the historic Jennings landfill area   |
| L5425/1989/11  | 17/07/2018 | Amendment Notice 3 – extend expiry date by 12 months  |
| W6215/2019/1   | 12/03/2019 | Works approval to construct a barite removal circuit  |
| L5425/1989/11  | 23/08/2019 | Amendment Notice 4 – extend expiry date by 12 months  |
| L5425/1989/11  | 02/10/2019 | Amendment Notice 5 – approval to operate the barite removal circuit   |
| L5425/1989/11  | 12/08/2020 | DWER initiated amendment to extend licence for 3 months   |
| L5425/1989/12  | 5/11/2020  | Licence renewed, premises boundary extended to include adjoint premises and DWER initiated amalgamation of previous Amendment Notices 2 and 5.                                |
| L5425/1989/12  | 18/09/2025 | Licence amendment to expand the existing HMC stockpile area, introduce an additional HMC feed source from Iluka's Balranald Mine, and update the registered business address. |
| L5425/1989/13  | 17/02/2026 | Transfer of licence holder from <i>Iluka Resources Limited</i> to <i>Iluka Eneabba Pty Ltd</i> . Version number updated due to transfer.                                      |

## Definitions

In these Conditions of Licence, unless inconsistent with the text or subject matter:

**‘AACR’** Annual Audit Compliance Report means a report in a format approved by the CEO as presented by the licence holder or as specified by the CEO from time to time and published on the Department’s website.

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

**‘AHD’** means the Australian height datum;

**‘Annual period’** means the inclusive period from 1 July until 30 June in the following year;

**‘Approved’ or ‘approval’** means approved or approval in writing from time to time

**AS 3580.1.1’** means the Australian Standard AS 3580.1.1 *Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment*;

**‘AS 3580.9.6’** means the Australian Standard AS 3580.9.6 *Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM<sub>10</sub> high volume sampler with size - selective inlet – Gravimetric method*;

**‘AS 3580.10.1’** means the Australian Standard AS 3580.10.1 *Methods for sampling and analysis of ambient air Determination of particulate matter - Deposited matter - Gravimetric method*;

**‘AS 3580.9.3’** means the Australian Standard AS 3580.9.3 *Methods for sampling and analysis of ambient air Determination of suspended particulate matter - Total suspended particulate matter (TSP) - High volume sampler gravimetric method*;

**‘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 5667.4’** means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made*;

**‘AS/NZS 5667.6’** means the Australian Standard AS/NZS 5667.6 *Water Quality – Sampling – Guidance on sampling of rivers and streams*;

**‘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 of groundwaters*;

**‘AS/NZS 5667.12’** means the Australian Standard AS/NZS 5667.12 *Water Quality – Sampling – Guidance on sampling of bottom sediments*;

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

**‘Balranald NHMC’** means non-magnetic heavy mineral concentrate (NHMC) sourced from the Balranald Critical Minerals Development;

**‘Cataby NHMC’** means non-magnetic heavy mineral concentrate (NHMC) sourced from the Cataby Mineral Sands Mine, and includes NHMC by-product from the North Capel Mineral Separation Plant;

**CEMS’** means continuous emissions monitoring system;

‘**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](mailto:info@dwer.wa.gov.au)

‘**Discharge**’ has the same meaning given to that term under the EP Act

‘**Department; DWER**’ 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;

‘**Emission**’ has the same meaning given to that term under the EP Act;

‘**Environmental harm**’ has the same meaning given to that term under the EP Act;

‘**EP Act**’ means *Environmental Protection Act 1986* (WA);

‘**Extreme rainfall event**’ means an event having rainfall equivalent to a 1% annual exceedance probability (AEP) over a period of at least 3 hours as defined by the Bureau of Meteorology’s 2016 Rainfall IFD (Intensity– Frequency–Duration) System;

‘**Freeboard**’ means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point;

‘**HMC**’ means Heavy Mineral Concentrate;

‘**Implementation agreement or decision**’ has the same meaning given to that term under the EP Act;

‘**Inert waste type 1**’ has the meaning defined in Landfill Definitions;

‘**Inert waste type 2**’ has the meaning defined in Landfill Definitions;

‘**Landfill definitions**’ means the document titled “*Landfill Waste Classification and Waste Definition 1996*” published by the Chief Executive Officer of the Department of Environment as amended from time to time;

‘**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;

‘**Material environmental harm**’ has the same meaning given to that term under the EP Act;

‘**mbgl**’ means metres below ground level;

‘**MSP**’ means Mineral Separation Plant

‘**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;

‘**NHMC**’ means Non-magnetic Heavy Mineral Concentrate;

‘**PM<sub>10</sub>**’ means particles with an aerodynamic diameter of less or equal to 10 µm;

‘**Pollution**’ has the same meaning given to that term under the EP Act;

‘**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;

**‘quarterly’** means the 4 inclusive periods from, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March, 1 April to 30 June;

**‘RL’** means Reduced Level and refers to height or elevation above the point adopted as the site datum for the purpose of establishing levels;

**‘Schedule 1’** means Schedule 1 of this licence unless otherwise stated;

**‘Schedule 2’** means Schedule 2 of this licence unless otherwise stated;

**‘six monthly’** means the 2 inclusive periods from 1 July to 31 December and 1 January to 30 June in the following year;

**‘Serious environmental harm’** has the same meaning given to that term under the EP Act;

**‘spot sample’** means a discrete sample representative at the time and place at which the sample is taken;

**‘TSF’** means Tailings Storage Facility;

**‘Unreasonable emission’** has the same meaning given to that term under the EP Act;

**‘Waste’** has the same meaning given to that term under the EP Act;

**‘ $\mu\text{S}/\text{cm}$ ’** means microsiemens per centimeter;

**‘ZFP’** means Zircon Finishing 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

### Infrastructure and equipment

- The licence holder must ensure the infrastructure and equipment specified in Column 1 of Table 1 is maintained in good working order and operated in accordance with the requirements specified in Column 2 of Table 1.

**Table 1 Infrastructure and equipment controls table**

|      | Column 1                          | Column 2   |
|------|-----------------------------------|--|
| Item | Infrastructure/ Equipment         | Description and operational requirements   |
| 1    | Barite wet circuit                | <ul style="list-style-type: none"> <li>Design capacity: 20.8 tonnes per hour</li> </ul>  |
| 2    | Cataby NHMC storage pad           | <ul style="list-style-type: none"> <li>Constructed with compacted soil or similar;</li> <li>Pad must be sloped to allow the collection of surface water runoff</li> </ul>  |
| 3    | Balranald NHMC storage pad        | <ul style="list-style-type: none"> <li>Construction of storage pad is to occur only during day shift (6am to 6pm) to mitigate noise migrating off site at night;</li> <li>Constructed with compacted soil (minimum 90% modified maximum dry density to a depth of 300 mm);</li> <li>Construction of an earthen perimeter bund varying from 2.7 m to 5 m in height around the HMC stockpile storage area;</li> <li>Storage pad must be sloped to allow the collection of surface water runoff into a sump</li> <li>All surface water runoff from the storage pad is directed to a collection sump for infiltration and evaporation;</li> <li>Portable pumps will be available as a contingency measure during heavy rainfall events to pump stormwater to areas within the plant such as other stormwater sumps.</li> </ul> |
| 4    | JA-HMC storage pad                | <ul style="list-style-type: none"> <li>Lined with HDPE liner</li> <li>Leachate collected and pumped to lined TSFs</li> </ul>   |
| 5    | Collector storage and mixing area | <ul style="list-style-type: none"> <li>None specified</li> </ul>   |
| 6    | MSP Plant 1                       | <ul style="list-style-type: none"> <li>005 Dryer equipped with baghouse dust collector</li> <li>001 Dryer equipped with cyclone dust collector</li> </ul>  |
| 7    | MSP Plant 2                       | <ul style="list-style-type: none"> <li>206 Dryer equipped with baghouse and cyclone dust collector</li> <li>207 Dryer equipped with cyclone dust collector</li> </ul>  |
| 8    | MSP Washplant                     | <ul style="list-style-type: none"> <li>605 Dryer equipped with cyclone dust collector</li> <li>Continuous particulate monitor on 605 Dryer</li> <li>Bunded/sleeved pipeline to lined TSFs; automatic pump cut offs when leak is detected</li> </ul>  |
| 9    | ZFP                               | <ul style="list-style-type: none"> <li>ZFP Stack equipped with wet scrubber</li> <li>ZFP Dryer equipped with baghouse and cyclone dust collector</li> <li>Continuous particulate monitor on ZFP Dryer</li> </ul> <p><u>ZFP pipeline</u></p>  |

|      | Column 1   | Column 2  |
|------|--|---|
| Item | Infrastructure/ Equipment                            | Description and operational requirements  |
|      |  | <ul style="list-style-type: none"> <li>Bunded/sleeved pipeline to lined TSFs; automatic pump cut offs when leak is detected</li> <li>inspected and maintained regularly including condition of sleeves and leak detection boxes;</li> </ul> |
| 10   | Process water dams                                   | Lined with HDPE liner with the exception of slimes settling dams.   |
| 11   | Pipeline delivering waste streams to TSFs (Figure 1) | <ul style="list-style-type: none"> <li>Pipeline sleeved with HDPE, and equipped with inspection boxes every 100 m for spill recovery</li> </ul>   |
| 12   | TSFs (Figure 1)                                      | <ul style="list-style-type: none"> <li>None specified<sup>1</sup></li> </ul>  |

Note 1: Emissions and discharges covered under Ministerial Statement 88

## Emissions (general)

2. The licence holder must not cause any emissions except for specified emissions and general emissions described in Column 1 of Table 2, and subject to the exclusions, limitations or requirements specified in Column 2 of Table 2.

**Table 2 Authorised emissions table**

| Column 1   | Column 2  |
|--|---|
| Emissions type   | Exclusions/limitations/requirements   |
| <b>Specified emissions</b>                             |   |
| Washplant wastewater (from washing HMC)                | Must be: <ul style="list-style-type: none"> <li>Recycled within the MSP process; or</li> <li>Discharged into the existing TSFs at the adjacent synthetic rutile plant site (JA-HMC)</li> </ul>  |
| Process water bleed from flotation circuit (Stream 17) | <ul style="list-style-type: none"> <li>Must be discharged to existing MSP process water dams</li> </ul>   |
| Barite by-product (Stream 13)                          | <ul style="list-style-type: none"> <li>Storage permitted within the existing tails stockpile area, pending future processing or off-site disposal</li> </ul>  |
| Used acid (neutralised) from the ZFP                   | <ul style="list-style-type: none"> <li>Discharged into TSFs (Figure 1)</li> <li>Recovered process water recycled within ZFP</li> </ul>  |
| Particulates from MSP Plant 1                          | <ul style="list-style-type: none"> <li>001 Dyer and 005 Dryer for controlled release of gases formed from the drying of wet mineral (primarily steam) during normal operating conditions</li> <li>From 005 Dryer (0.44 m diameter) and 001 Dryer (0.92 m diameter) (both 28 m above ground level) as shown in Figure 1</li> </ul>                       |
| Particulates from MSP Plant 2                          | <ul style="list-style-type: none"> <li>206 Dryer and 207 Dryer for controlled release of gases formed from the drying of wet mineral (primarily steam) during normal operating conditions</li> <li>From 206 Dryer (28.7 m above ground level, 0.485 m diameter) and 207 Dryer (28 m above ground level, 0.8 m diameter) as shown in Figure 1</li> </ul> |

| Column 1  | Column 2  |
|---|---|
| Emissions type  | Exclusions/limitations/requirements   |
| <b>Specified emissions</b>  |   |
| Particulates from MSP washplant   | <ul style="list-style-type: none"> <li>• Dryer 605 for controlled release of gases formed from the drying of wet mineral (primarily steam) during normal operating conditions</li> <li>• From 605 Dryer (28 m above ground level, 1.44 m diameter) as shown in Figure 1</li> </ul>  |
| Particulates from ZFP   | <ul style="list-style-type: none"> <li>• ZFP Dryer for controlled release of gases formed from the drying of wet mineral (primarily steam) during normal operating conditions</li> <li>• From ZFP Dryer (32 m above ground level, 1.2 m diameter) as shown in Figure 1</li> </ul>   |
| SOx as sulphuric acid mist from ZFP                                     | <ul style="list-style-type: none"> <li>• For controlled release of scrubbed waste gases from the ZFP leach circuit during normal operating conditions</li> <li>• From ZFP Stack (19 m above ground level, 1.2 m diameter) as shown in Figure 1</li> </ul>   |
| <b>General emissions</b>  |   |
| Emissions which arise from the primary activities set out in Schedule 1 | <p>Emissions excluded from general emissions are:</p> <ul style="list-style-type: none"> <li>• Unreasonable emissions; or</li> <li>• Emissions that result in, or are likely to result in, pollution, material environmental harm or serious environmental harm; or</li> <li>• Discharges of waste in circumstances likely to cause pollution; or</li> <li>• Emissions that result, or are likely to result in, the discharge or abandonment of waste in water to which the public has access; or</li> <li>• Emissions or discharges which do not comply with an approved policy, a prescribed standard, or the conditions in an Implementation agreement or decision; or</li> <li>• Emissions or discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</li> </ul> |

## Air pollution control conditions

### Dust general requirement

3. The licence holder shall take all reasonable and practicable measures to prevent the generation of visible dust across the boundary of the premises from all material handling operations, open areas, transport activities, storage sheds, plants and associated equipment.
4. The licence holder shall employ routine maintenance and housekeeping practices to ensure that there is no accumulation of waste materials in or around the premises so that no visible dust crosses the boundary of the premises.
5. The licence holder shall use appropriate dust suppression techniques to prevent visible dust lift-off from non-working faces and working faces of stockpiles.

### Sulphuric acid vapour

6. The licence holder shall ensure that the installed water spray scrubber system in the zircon finishing plant is maintained to prevent the emission of sulphuric acid vapour

### Air quality and emissions monitoring

7. The licence holder must monitor the air for concentrations of the parameter listed in Table 3
- (a) at the corresponding monitoring location;
  - (b) in the corresponding unit;
  - (c) at no less than the corresponding frequency;
  - (d) for the corresponding averaging period; and
  - (e) using the corresponding method,
- as set out in Table 3.

**Table 3 Monitoring of ambient concentrations**

| Parameter        | Monitoring location                 | Unit              | Frequency                     | Method                              |
|------------------|-------------------------------------|-------------------|-------------------------------|-------------------------------------|
| TSP (Dust gauge) | Figure 3: Dust monitoring locations | µg/m <sup>3</sup> | Continuous, collected monthly | AS/NZS 3580.10.1<br>NATA accredited |

8. The licence holder must monitor emissions in accordance with the requirements specified in Table 4 and record the results of all such monitoring.

**Table 4 Emissions and discharge monitoring**

| Discharge point   | Parameter        | Frequency | Unit     | Method  |
|---|------------------|-----------|----------|---|
| 001 Dryer, 005 Dryer, 206 Dryer, 207 Dryer, 605 Dryer, ZFP Dryer, ZFP Stack | Moisture content | quarterly | %        | Stack testing conducted by independent, external contractor adhering to relevant USEPA sampling and equipment methodologies |
|   | Volume flow      |           | dscm/min |   |
|   | Velocity         |           | m/sec    |   |
|   | Temperature      |           | °C       |   |
|   | Particulates*    | annually  | mg/dscm  |   |
|   | Trace metals*    |           |          |   |
| ZFP Stack   | Particle sizing* | quarterly | mg/dscm  |   |

\*excluding ZFP Stack

9. The licence holder must implement the controls specified in Column 1 of Table 5 in accordance with the actions/requirements specified in Column 2 of Table 5.

**Table 5 Fugitive dust controls table**

| Column 1   | Column 2   |
|--|--|
| Control  | Actions/requirements   |
| Water as a dust suppressant on active stockpiles | <ul style="list-style-type: none"> <li>• Must operate the following when there are discernible levels of dust lift-off from HMC stockpiles: <ul style="list-style-type: none"> <li>(i) Sprinklers/sprays where mains water is available; and</li> <li>(ii) Water cart where mains water is not available;</li> </ul> </li> <li>• Must apply proactively subject to weather forecasting over a 24-hour period.</li> </ul> |
| Dust suppressant (other than water)              | <ul style="list-style-type: none"> <li>• Must apply proactively to stockpiles;</li> <li>• Must apply proactively, subject to visual inspection and weather forecasting over a 24-hour period.</li> </ul>   |

### Water pollution control conditions

#### Discharges of contaminated water

10. The licence holder shall ensure that any discharge of contaminated water from the premises, other than directly to sewer or septic systems shall be via fuel/oil traps and silt traps.

#### Liquid chemical storage

11. The licence holder 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 ( $10^{-9}$  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.
12. The licence holder shall ensure that the compound(s) described in part (a) of this condition:
- be graded or include a sump to allow recovery of liquid;
  - be chemically resistant to the substances stored;
  - 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
  - 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)]
  - 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
  - be controlled such that the capacity of the bund is maintained at all times (e.g. regular inspection and pumping of trapped uncontaminated rainwater)
13. The licence holder shall immediately recover, or remove and dispose of off-site 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).

14. The licence holder shall keep a record of any incident that included the loss of chemicals including fuel, oil or other hydrocarbons and provide a summary of each incident in the annual report required in condition 25.

**Waste management**

15. The licence holder 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 wash down bays to enable recovery of spillages and protection of surrounding soils and groundwater.
16. The licence holder shall collect any spillages and waste material, as required by part (a) of this condition, and ensure that this material is either used in on-site processes or stored in a bunded area prior to disposal by export off-site.
17. The licence holder must only dispose waste on the premises if:
- (a) be chemically resistant to the substances stored;
  - (b) it is of a type listed in Table 6;
  - (c) the quantity is below any quantity limit listed in Table 6;
  - (d) it meets any specification listed in Table 6

**Table 6 Authorised waste types**

| Column 1   | Column 2              | Column 3   |
|--|-----------------------|--|
| Waste type   | Quantity limit (t/yr) | Specifications   |
| Soil contaminated with ACM and/or NORM only, generated from decommissioning and/or remediation works on the premises | 500 (combined)        | <ul style="list-style-type: none"> <li>• Disposal of ACM must be separate to, and not disturb, any previously disposed waste;</li> <li>• ACM must be wrapped or otherwise contained in a manner that prevents asbestos fibres entering the atmosphere during transportation;</li> <li>• Disposal must be by burial within the “Jennings landfill area”, as depicted by the yellow circled area on the waste disposal map in Schedule 1, Figure 1;</li> <li>• ACM must be immediately covered with a minimum 2 m of clean fill following disposal;</li> <li>• Must not be disposed within 2 m of the final landform surface;</li> <li>• Permanent records must be kept of all disposed material, including the nature and amount of material disposed.</li> </ul> |

**Water monitoring program and reporting**

18. The licence holder shall, at the frequencies stated, take representative water samples from the following monitoring sites (as per Figure 2), and have the samples analysed as set out in Table 7:

**Table 7 Ambient groundwater monitoring**

| Monitoring sites  | Sampling Frequency                                   | Parameters to be measured  |
|---|--|--|
| Monitoring bores:<br>B11, B12, B13, B14, B15, B16,<br>B22, B24*, B43, B44, B66, B80*,<br>B81, B82, B83  | Quarterly  | <u>Groundwater quality:</u><br>pH, Electrical Conductivity (EC), Total Dissolved Solids (TDS), Standing Water Level (SWL)**;<br><u>Major ions:</u><br>Calcium (Ca); Chloride (Cl); potassium (K); magnesium (Mg); Sodium (Na); Ammonium (NH <sub>4</sub> -N), Bicarbonate (HCO <sub>3</sub> ); Sulphate (SO <sub>4</sub> ); Nitrate (NO <sub>3</sub> )<br><u>Metals:</u><br>Boron (B); Cobalt (Co); Iron (Fe); Manganese (Mn); |
| Monitoring bores:<br>B1, B2, B3, B4(s), B4(D), B5, B6,<br>B7, B8, B9, B18, B19, B20, B21,<br>B23, B25, B26, B27, B28, B29,<br>B30, B31, B34, B35, B36, B37,<br>B38, B39, B40, B41, B42, B45,<br>B46, B47, B48, B49, B50, B51,<br>B52, B53, B58, B59, B60, B61,<br>B62, B63, B64, B67, B68, B69,<br>B84, B85 |  |  |
| Surface water locations:<br>stormwater dams SWD2, SWD3<br>and SWD4  | At least once per year when surface water is present | Hydrocarbon analysis suite   |

\* background location

\*\* the SWL shall be determined prior to collection of other water samples

19. The licence holder shall collect all water samples in accordance with the relevant part of Australian Standard 5667:1998, or other approved standard. <sup>[O&B]</sup>
20. The licence holder shall submit all water samples to a laboratory with current NATA accreditation for the specified analysis and ensure that the samples are analysed in accordance with the current 'Standard Methods for Examination of Water and Wastewater-APHA-AWWA-WEF'.

### Records and reporting

21. The licence holder must within 30 calendar days of item 3 required by condition 1 being constructed and/or installed:
  - (a) undertake an audit of their compliance with the requirements of condition 1; and
  - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
22. The Environmental Compliance Report required by condition 21, must include as a minimum the following:
  - (a) certification by a suitably qualified engineer that item 3 or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
  - (b) as constructed plans and a detailed site plan for item 3 specified in condition 1; and
  - (c) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

- 23.** 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
- 24.** 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 15 March each year an Annual Audit Compliance Report in the approved form
- 25.** The licence holder must submit to the CEO by 15 March each year an Annual Environmental Report containing monitoring data and other collected data required by any condition of this licence from 1 January to 31 December each year.
- 26.** 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 conditions 7, 8 and 18 of this licence; and
  - (d) complaints received under condition 23 of this licence.
- 27.** The books specified under condition 26 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.

# Schedule 1: Maps



Figure 1: Prescribed premises boundary and site layout map. The red line depicts the premises boundary.



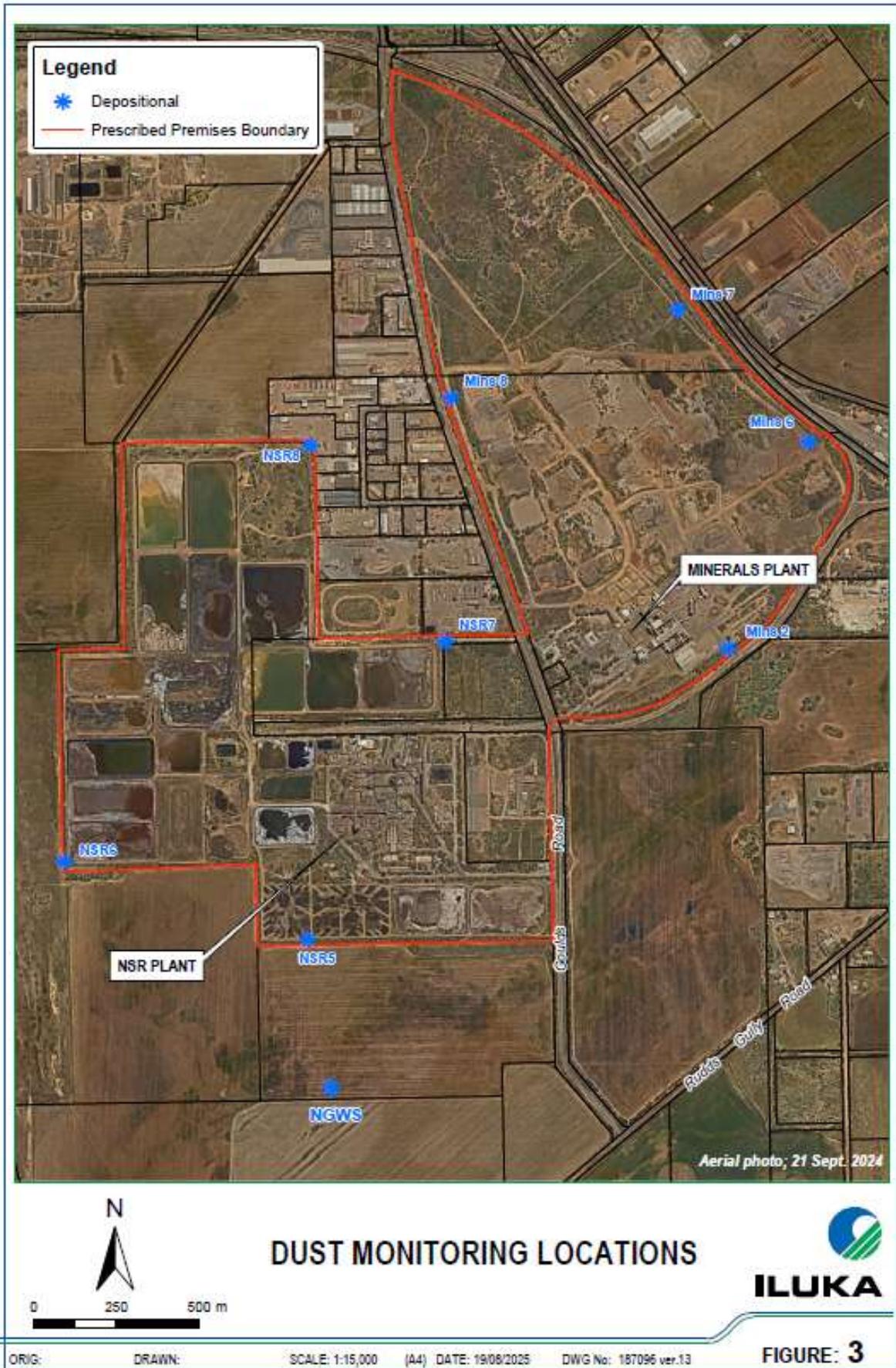


Figure 3: Dust monitoring locations

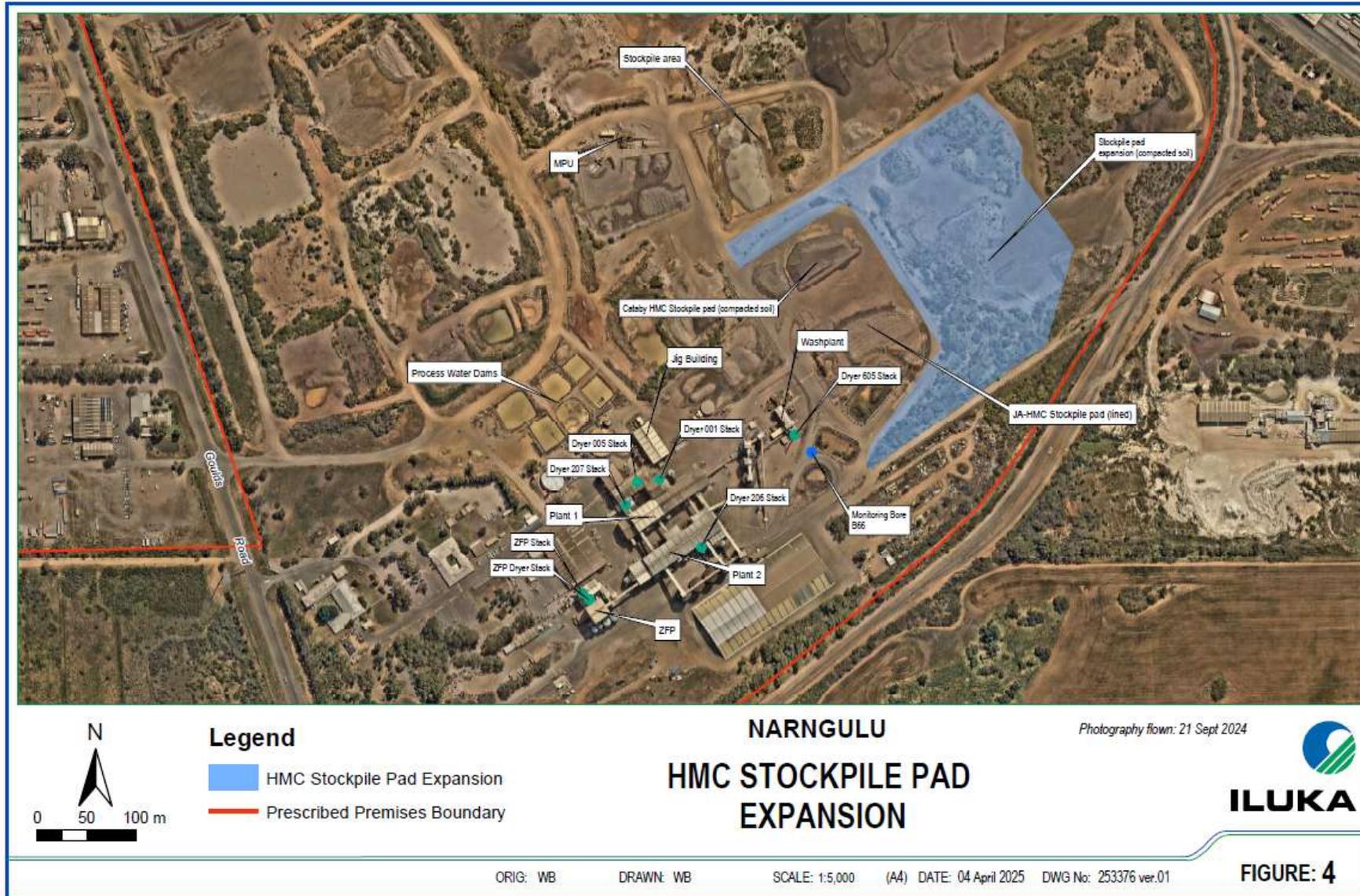


Figure 4: HMC stockpile pad expansion

## Schedule 2: Prescribed premises boundary

The corners of the premises boundary are the coordinates listed in Table 8

**Table 8: Premises boundary coordinates (GDA2020)**

| Point | Eastings | Nothings  |
|-------|----------|-----------|
| 1     | 272777.3 | 6811751.0 |
| 2     | 272903.6 | 6811707.0 |
| 3     | 272994.4 | 6811666.0 |
| 4     | 273168.0 | 6811570.0 |
| 5     | 273406.1 | 6811391.0 |
| 6     | 273470.1 | 6811333.0 |
| 7     | 273545.4 | 6811234.0 |
| 8     | 273557.6 | 6811217.0 |
| 9     | 273569.2 | 6811202.0 |
| 10    | 273748.9 | 6810965.0 |
| 11    | 273850.0 | 6810840.0 |
| 12    | 273851.8 | 6810838.0 |
| 13    | 274030.1 | 6810676.0 |
| 14    | 274067.4 | 6810648.0 |
| 15    | 274090.9 | 6810648.0 |
| 16    | 274107.4 | 6810626.0 |
| 17    | 274117.3 | 6810613.0 |
| 18    | 274134.0 | 6810591.0 |
| 19    | 274143.3 | 6810579.0 |
| 20    | 274159.2 | 6810527.0 |
| 21    | 274159.4 | 6810474.0 |
| 22    | 274143.6 | 6810422.0 |
| 23    | 274111.7 | 6810372.0 |
| 24    | 274070.8 | 6810307.0 |

| Point | Eastings | Nothings  |
|-------|----------|-----------|
| 25    | 273958.5 | 6810128.0 |
| 26    | 273919.1 | 6810075.0 |
| 27    | 273871.4 | 6810031.0 |
| 28    | 273779.7 | 6809958.0 |
| 29    | 273706.9 | 6809901.0 |
| 30    | 273687.5 | 6809886.0 |
| 31    | 273603.0 | 6809833.0 |
| 32    | 273509.2 | 6809798.0 |
| 33    | 273399.7 | 6809783.0 |
| 34    | 273279.6 | 6809781.0 |
| 35    | 273251.1 | 6809741.0 |
| 36    | 273253.5 | 6809734.0 |
| 37    | 273260.9 | 6809346.0 |
| 38    | 273265.6 | 6809103.0 |
| 39    | 272819.2 | 6809095.0 |
| 40    | 272372.9 | 6809087.0 |
| 41    | 272368.3 | 6809336.0 |
| 42    | 272076.7 | 6809324.0 |
| 43    | 271785.1 | 6809311.0 |
| 44    | 271778.7 | 6809649.0 |
| 45    | 271772.4 | 6809987.0 |
| 46    | 271972.0 | 6809991.0 |
| 47    | 271965.6 | 6810304.0 |
| 48    | 271959.3 | 6810617.0 |
| 49    | 272407.9 | 6810626.0 |
| 50    | 272545.1 | 6810629.0 |
| 51    | 272546.2 | 6810577.0 |
| 52    | 272547.3 | 6810525.0 |

| Point | Eastings | Nothings  |
|-------|----------|-----------|
| 53    | 272548.3 | 6810473.0 |
| 54    | 272549.4 | 6810421.0 |
| 55    | 272551.3 | 6810329.0 |
| 56    | 272554.0 | 6810199.0 |
| 57    | 272557.6 | 6810023.0 |
| 58    | 272874.1 | 6810030.0 |
| 59    | 272934.2 | 6810031.0 |
| 60    | 273191.0 | 6810037.0 |
| 61    | 273075.2 | 6810371.0 |
| 62    | 272919.3 | 6810822.0 |
| 63    | 272848.2 | 6811189.0 |
| 64    | 272781.4 | 6811534.0 |
| 65    | 272777.3 | 6811751.0 |