Government of Western Australia
Department of Water and Environmental Regulation

# Amendment Report

## Application for Licence Amendment

**Part V Division 3 of the *Environmental Protection Act 1986***

| | |
|---|---|
| **Licence Number** | L9176/2018/1 |
| **Licence Holder** | Iluka Resources Limited |
| **ACN** | 008 675 018 |
| **File Number** | APP-0029465 |
| **Premises** | Cataby Mineral Sands Mine<br><br>10437 Brand Highway<br>CATABY WA 6507<br><br>Legal description –<br><br>Mining tenements: M70/194, M70/195, M70/196, M70/517, M70/518, M70/696, M70/760, M70/867, M70/868, M70/869, M70/1018, M70/1086, G70/277<br><br>As defined by the premises maps attached to the licence |
| **Date of Report** | 14 November 2025 |
| **Decision** | Revised licence granted |

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# 1. Decision summary

Licence L9176/2018/1 is held by Iluka Resources Limited (licence holder; Iluka) for the Cataby Mineral Sands Mine (the premises), located at 10437 Brand Highway, Cataby.

This amendment report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the premises. As a result of this assessment, revised licence L9176/2018/1 has been granted.

# 2. Scope of assessment

## 2.1 Regulatory framework

In completing the assessment documented in this amendment report, the department has considered and given due regard to its regulatory framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

## 2.2 Amendment summary

On 12 June 2025, the licence holder submitted an application to the department to amend licence L9176/2018/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Construction of three new mine pits (21, 24 and 25) and associated infrastructure; and
- Amend the current prescribed premises boundary to reflect the updated Ministerial Statement 1017 development envelope.

The proposed pits are located on existing cleared agricultural paddocks with no intact remnant vegetation located within the proposed pit footprints.

The proposed pits will be dry mined under the same mining methods approved under L9176/2018/1 with no dewatering of the pits to occur. Pits will be backfilled with overburden and sand tails or blended sand/ clay tails (ModCod) and once final contours are reached, subsoil and topsoil will be replaced and the area restored to an appropriate land use.

No changes to the current approved throughputs or method of processing of the ore are proposed.

## 2.3 Legislative context

### 2.3.1 Part IV of the EP Act

The original mine proposal was referred to the Environmental Protection Authority (EPA) in March 2003 under section 38 of the EP Act, who set an EPS level of assessment in April 2003.

The proponent submitted its final EPS document to the EPA in November 2005, with the EPA providing its report and recommendations to the Minister for the Environment (Minister) in December 2005 (EPA Bulletin 1212). The Minister subsequently approved the project through the publishing of ministerial statement (MS) MS 720 on 18 April 2006.

In October 2015, MS 720 was replaced by MS 1017, following changes to the implementation conditions and proponent commitments. The proposal is subject to a number of conditions relating to the management of terrestrial fauna, flora and vegetation, amenity and offsets.

On 15 September 2025, a section 45c amendment to MS 1017 was granted. The amendment related to increasing the area of disturbance and development envelop (the area subject to this assessment), decreasing the area of native vegetation clearing, increasing the volume of overburden handled and removal of a Western Power corridor extension from the development

envelop.

The conditions specifically authorised under MS 1017 relevant to this application are:

- The location and authorised extent of the development envelope;
- The proposal shall be implemented in a manner that ensures that the impact of groundwater drawdown on vegetation is avoided as far as practicable;
- The proponent shall implement the latest approved Groundwater-dependent Ecosystem Management Plan;
- The proponent shall implement the latest approved Noise Management Plan;
- The proponent shall implement the latest Vegetation and Flora Management Plan; and
- The proponent shall implement the latest Surface Water Management Plan.

**Key findings:**

The delegated officer considers that noise is adequately assessed and regulated under Part IV of the EP Act via MS 1017. The licence holder is required to manage noise emissions in accordance with the latest approved Noise Management Plan required by condition 9-6 of MS 1017. Consequently, noise impacts have not been reassessed as part of this amendment.

### 2.3.2 *Rights in Water and Irrigation Act 1914*

Iluka holds groundwater licence GWL175697(1) for the abstraction of up to 14 gigalitres (GL) per annual period for the purpose of dewatering for mining purposes, dust suppression for mining purposes and mineral ore processing and other mining purposes. Groundwater may only be abstracted from the Superficial Aquifer. The licence is subject to Iluka complying to the commitments of the Groundwater Operating Strategy (Iluka 2015) as updated in May 2019 (Iluka 2019).

### 2.3.3 *Mining Act 1978* (WA)

The Department of Mines. Petroleum and Exploration (DMPE) (formerly the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS)) approved mining proposal (Registration ID: 55412) to develop the mineral sands deposit on tenements M70/194, M70/195, M70/196, M70/517, M70/518, M70/696, M70/760, M70/868, M70/869, M70/1018 and M70/1086, all of which is over private land.

A Mine Closure Plan (Registration ID: 110411) for the premises was approved by DMPE on 19 October 2023.

# 3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk assessments* (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

## 3.1 Source-pathways and receptors

### 3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and operation which have been considered in this amendment report are detailed in Table 1 below. Table 1 also details the proposed control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

**Table 1: Licence holder controls**

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| **Construction** | | | |
| Dust | Civil earthworks, material movement, construction of ancillary infrastructure (roads, drains etc.) | Air/windborne pathway | • Dust suppression will be implemented (including use of water trucks, control of vehicle movements / restricted speeds) during construction. |
| Sediment laden stormwater | | Overland runoff | • Liquid chemicals, including hydrocarbons will be stored in designated areas and on self-bunded facilities;<br>• Design of drainage infrastructure based on modelling will maintain offsite natural surface water flows as much as possible; and<br>• Stormwater will be diverted from active areas to natural downstream drainage in a way that prevents increased rates of sedimentation and erosion. |
| **Operation** | | | |
| Dust | Mining of ore from pits 21, 24 and 25 | Air/windborne pathway | • Dust suppression will be implemented (including use of water trucks, control of vehicle movements / restricted speeds); and<br>• Dust management controls and trigger levels as per the existing licence conditions (condition 9, table 7).<br>• Dust monitoring requirements with limits and actions as per existing licence conditions (condition 16, table 11 and condition 17, table 12). |
| Disturbance of Potential Acid Sulfate Soils (PASS) causing acidification | | Infiltration to groundwater | • As per existing licence controls (condition 10, tables 8 and 9). |
| Contaminated and/or sediment laden | | Overland runoff | • Runoff from undisturbed catchments upstream of and within the premises will be diverted away from mine pits, infrastructure and other operational |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| stormwater | | | areas;<br>• The flow will be directed away from the mine infrastructure into existing drainage lines through bunding;<br>• Surface water runoff generated in active pits and non-rehabilitated areas (i.e. pits closed for less than or equal to 2 years) will be collected via sumps within the respective pits and pumped to the process water management system; and<br>• Surface water runoff generated in disturbed sub-catchments (e.g. stockpiles, roads and rehabilitated areas, sub-catchments containing pits that area active or have been closed less than or equal to 2 years) will be diverted to stormwater management infrastructure (i.e. dams, ponds and drains), which has been sized to contain a 1:10 AEP 6-hour storm event. |
| Dust | Disposal of sand tailings, overburden and/or "modcod" into pits 21, 24 and 25. | Air/windborne pathway | • Dust suppression will be implemented (including use of water trucks, control of vehicle movements / restricted speeds). |
| Tailings seepage | | Infiltration to groundwater | • As per existing licence controls. |
| Tailings (overtopping or pipeline rupture) | | Overland runoff | • Pipelines from the WCP to the void will run parallel with mining haul roads;<br>• Secondary containment in the form of a 1 m high earthen bunds will be created; and<br>• Pumps and slurry flow will be monitored with flow meters at designated pumping stations. The operator in the control room will monitor flow readings, and pressure gauges throughout the pipeline system will alert the operator of issues. |

### 3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the delegated officer has excluded employees, visitors and contractors of the licence holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises *(Guideline: Environmental siting* (DWER 2020)).

**Table 2: Sensitive human and environmental receptors and distance from prescribed activity**

| **Human receptors** | **Distance from prescribed activity** |
|---|---|
| Liberty Roadhouse | Approximately 6 km north-west of the pit 21 |
| AMPOL Roadhouse / rural residence 10513 Brand Highway, Cataby | Approximately 3.4 km north-west of the pit 21 |
| 6 residential properties<br>Two roadhouses are located along the Brand Highway and within the premises boundary, with each of these including motel-style accommodation. The Liberty Roadhouse, which is located immediately adjacent to Pit 9/12 includes a licensed hotel and is owned by the licence holder. | Within 1 km of the prescribed premises boundary. The closest residential receptor is 220 m east of pits 24/25. |
| Carpenter Beef Pty Ltd<br>10944 Brand Highway, CATABY 6507 | Large farm to the east of the premises, across the Brand Hwy. Approximately 6.3 km north-west of the pit 21. |
| **Environmental receptors** | **Distance from prescribed activity** |
| **Land use** | |
| Pastural lands for cropping and cattle and sheep grazing | Underlying and surrounding the prescribed premises.<br>This was the previous land use and will likely be the post-mining land use. |
| **Flora and fauna** | |
| Threatened and Priority Ecological Communities (TEC / PEC)<br>Priority 3 Banksia Woodlands of the Swan Coastal Plain ecological community | Within 1 km of the prescribed premises. |
| Threatened and/or priority flora | *Eleocharis keigheryi* (Keighery's Eleocharis) listed as vulnerable is found within the premises within the no-mining are. |
| Threatened and/or priority fauna | *Zanda latirostris* (Carnaby's Cockatoo) listed as endangered can be found within the premises boundary. |
| Native vegetation | The premises is characterised by cleared pasturelands that are used to graze cattle and sheep. Remaining native vegetation is fragmented across the landscape and often completely degraded as a result of grazing. The premises is adjacent to a number of regionally significant conservation reserves.<br>One area identified as the 'Oliver Remnant' has been |

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| | recognised as having high conservation value, despite its degraded condition, due to its floristic features (presence of threatened and priority species) and as a breeding area for the endangered Carnaby's Black Cockatoo. The 'Oliver Remnant' contains both flora and fauna of the mixed Wandoo/Marri woodland complex that follows the channel of the Cataby Brook. The Oliver Remnant is approximately 1.8 km north-west of pit 21. |
| **Surface water bodies** | |
| Minyulo Brook<br>(also a cultural receptor) | Within and adjacent to the premises.<br>Approximately 7.5 km north-west of Pit 21.<br>Approximately 11 km north-west of Pits 24 and 25. |
| Cataby Brook | Within and adjacent to the premises.<br>Approximately 2 km north of Pit 21.<br>Approximately 5.4 km north-west of Pits 24 and 25. |
| Native Dog Swamp | Adjacent to the premises boundary.<br>Approximately 3.5 km west of Pit 21.<br>Approximately 6 km north-west of Pits 24 and 25. |
| Caro Swamp | 2.5 km west of the premises boundary. |
| Eneminga Swamp | 2.5 km south-west of the premises boundary. |
| **Groundwater** | |
| Underlying groundwater | <u>Groundwater depth:</u><br>Groundwater levels vary in relation to topography. To the east of the Gingin Scarp, levels can be quite deep (20 – 45 meters below ground level (mbgl)), where to the west groundwater is significantly shallower and in the order of 10 – 15 mbgl.<br><u>Groundwater quality:</u><br>Groundwater generally has total dissolved solids (TDS) of less than 2,000 mg/L, with higher concentrations known to occur along some drainage lines and wetlands bodies where evaporation is active, and also near streams (e.g. Minyulo Brook) which receive saline runoff from farming areas.<br><u>Groundwater flow direction:</u><br>The hydrology of the local area comprises a throughflow system, with groundwater flowing in a west to south-west direction toward the coast. |
| Groundwater dependent ecosystems (GDE) | Within and adjacent to the premises |
| *Rights in Water and Irrigation Act 1914* (RIWI Act) Proclaimed groundwater – | Within premises boundary |

| | |
|---|---|
| Gingin Groundwater Area | |
| Beneficial users of groundwater | 56 groundwater licences within 5 km of the premises boundary |
| **Cultural receptors** | **Distance from prescribed activity** |
| Minyulo Brook (Bilya) | Within premises boundary, intersecting Pit 16 |
| Iluka Cataby 08 | 130m west of the premises boundary |
| Danadaragan (arefacts) | 600 m west of the premises boundary |

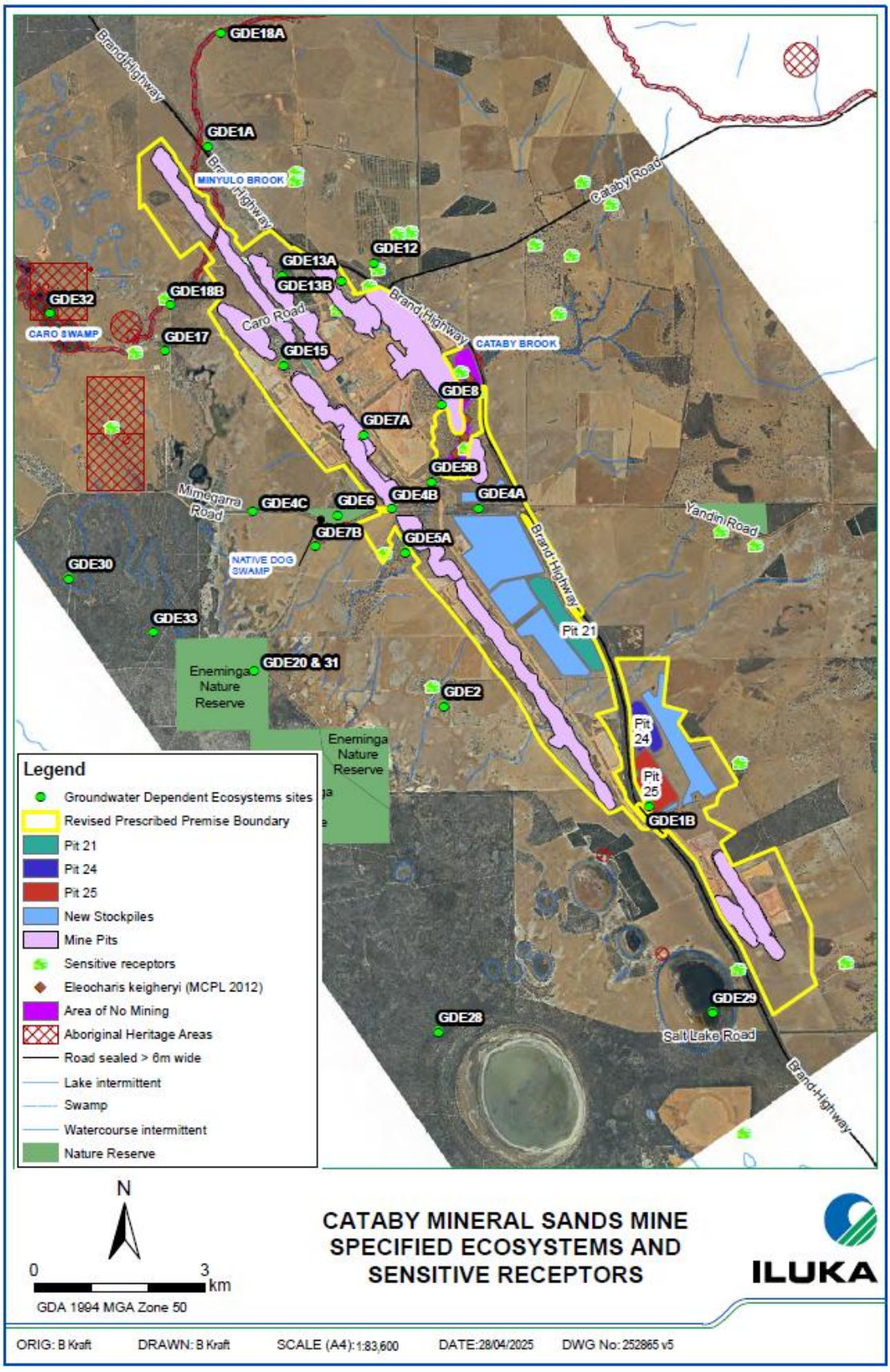


**Figure 1: Distance to sensitive receptors**

## 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the licence holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the delegated officer considers the licence holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the licence holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

The revised licence L9176/2018/1 that accompanies this amendment report authorises emissions associated with the construction and operation of the premises.

The conditions in the revised licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

**Table 3. Risk assessment of potential emissions and discharges from the premises during construction and operation**

| Risk Event | | | | | Risk rating[1] C = consequence L = likelihood | Licence holder's controls sufficient? | Conditions[2] of licence | Justification for additional regulatory controls |
|---|---|---|---|---|---|---|---|---|
| **Source/Activities** | **Potential emission** | **Potential pathways and impact** | **Receptors** | **Licence holder's controls** | | | | |
| **Construction** | | | | | | | | |
| Civil earthworks, material movement, construction of ancillary infrastructure (roads, drains etc.) | Dust | Air/windborne pathway causing impacts to health and amenity | Residences within 1 km of premises<br>Roadhouses within 1 km of premises<br>Native vegetation including TECs and priority flora | See detailed risk assessment outlined in Section 3.3 | | | | |
| | Sediment laden stormwater | Overland runoff causing ecosystem disturbance or impact to surface water quality | Surrounding agricultural land<br>Native vegetation including TECs and priority flora<br>Surrounding surface water bodies including culturally significant water bodies | Refer to Section 3.1 | C = Moderate<br>L = Unlikely<br>**Medium Risk** | Y | <u>Existing conditions:</u><br>Condition 3 | N/A |
| **Operation** | | | | | | | | |
| Mining of ore from pits 21, 24 and 25 | Dust | Air/windborne pathway causing impacts to health and amenity | Residences within 1 km of premises<br>Roadhouses within 1 km of premises<br>Native vegetation including TECs and priority flora | See detailed risk assessment outlined in Section 3.3 | | | | |
| | Disturbance of Potential Acid Sulfate Soils (PASS) causing acidification | Infiltration to groundwater impacting groundwater quality causing ecosystem disturbance | Underlying groundwater<br>Beneficial users of groundwater<br>Groundwater dependent ecosystems | Refer to Section 3.1 | C = Major<br>L = Unlikely<br>**Medium Risk** | Y | <u>Existing conditions:</u><br>Conditions 10, 18, 22 and 23 | N/A |
| | Contaminated and/or sediment laden stormwater | Overland runoff causing ecosystem disturbance or impact to surface water quality | Surrounding agricultural land<br>Native vegetation including TECs and priority flora | Refer to Section 3.1 | C = Moderate<br>L = Unlikely<br>**Medium Risk** | Y | <u>Existing conditions:</u><br>Condition 3 | N/A |

| Risk Event | | | | | Risk rating[1]<br>C = consequence<br>L = likelihood | Licence holder's controls sufficient? | Conditions[2] of licence | Justification for additional regulatory controls |
|---|---|---|---|---|---|---|---|---|
| **Source/Activities** | **Potential emission** | **Potential pathways and impact** | **Receptors** | **Licence holder's controls** | | | | |
| | | | Surrounding surface water bodies including culturally significant water bodies | | | | | |
| Disposal of sand tailings, overburden and/or "modcod" into pits 21, 24 and 25. | Dust | Air/windborne pathway causing impacts to health and amenity | Residences within 1 km of premises<br>Roadhouses within 1 km of premises<br>Native vegetation including TECs and priority flora | See detailed risk assessment outlined in Section 3.3 | | | | |
| | Tailings seepage | Infiltration to groundwater impacting groundwater quality causing ecosystem disturbance | Underlying groundwater<br>Beneficial users of groundwater<br>Groundwater dependent ecosystems | Refer to Section 3.1 | C = Minor<br>L = Possible<br>**Medium Risk** | Y | <u>Existing conditions:</u><br>Conditions 18, 22 & 23 | N/A |
| | Tailings (overtopping or pipeline rupture) | Overland runoff causing ecosystem disturbance or impact to surface water quality | Surrounding agricultural land<br>Native vegetation including TECs and priority flora<br>Surrounding surface water bodies including culturally significant water bodies | Refer to Section 3.1 | C = Moderate<br>L = Unlikely<br>**Medium Risk** | Y | <u>Existing conditions:</u><br>Conditions 2, 3, 4, 5 & 22 | N/A |

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

Note 2: Proposed licence holder's controls are depicted by standard text. **<u>Bold and underline text</u>** depicts additional regulatory controls imposed by department.

## 3.3 Detailed risk assessment for dust emissions

### 3.3.1 Description of dust emissions

The construction, mining and backfilling of proposed Pits 21, 24 and 25 has the potential to generate dust emissions. Dust generated from mineral sand mining operations may cause adverse impacts to human health, vegetation health and amenity.

### 3.3.2 Identification and general characterisation of emission

Dust emissions associated with the construction, mining, and backfilling activities of Pits 21, 24 and 25 are primarily generated through mechanical disturbance of soil and mineral sands, vehicle movement on unsealed surfaces, and wind erosion of exposed surfaces and stockpiles. These emissions are typically composed of particulate matter (PM), including:

- Total Suspended Particulate Matter (TSP) – encompassing all airborne particles regardless of size, which provides a broad measure of dust load in the atmosphere.
- Particulate matter ($PM_{10}$) – coarse particles with aerodynamic diameters less than 10 micrometres, which can affect respiratory health and settle on vegetation and infrastructure.
- Particulate matter ($PM_{2.5}$) – fine particles less than 2.5 micrometres in diameter, which can penetrate deep into the lungs and pose more significant health risks.

The majority of dust generated during the operation of a mineral sands mine is coarse particulate matter ($PM_{10}$), being comprised of unprocessed mineral oxide particles.

Dust emissions tend to be intermittent and vary in intensity depending on operational activities, meteorological conditions (e.g. wind speed, humidity) and the effectiveness of dust suppression measures. The spatial distribution of dust emissions is expected to be localised around active mining areas, processing areas, haul roads and material handling areas. Off-site transport of dust may be possible depending on the weather conditions.

### 3.3.3 Description of potential adverse impacts from emissions

The premises is located within the Csa climate zone under the Köppen climate classification system. This denotes a Mediterranean climate which is characterised by hot, dry summers, mild winters and low annual precipitation. Based on the climate data from the nearest Bureau of Meteorology (BoM) weather station, the Badgingarra Research Station (station number 009037) (1965-2010), the prevailing wind is easterly to north-easterly in the morning to south-westerly in the afternoon. This is depicted in the wind roses show in Figure 2.

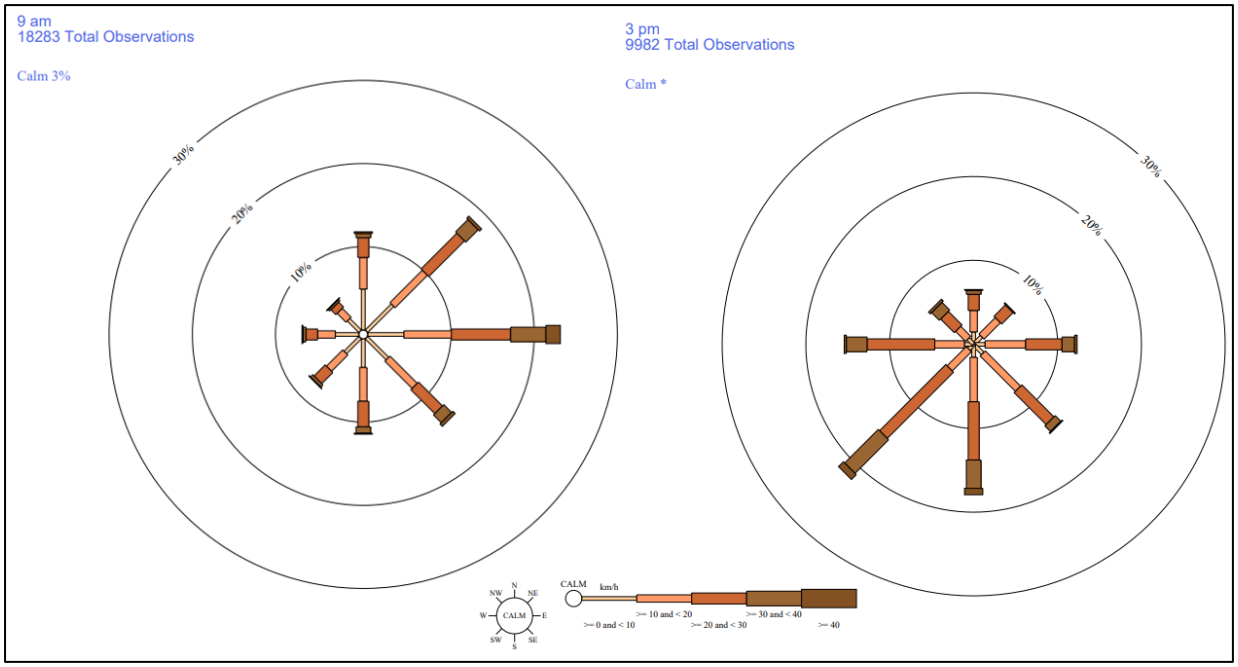


**Figure 2: Wind direction and strength at Badgingarra Research Station at 9am (left) and 3pm (right) (Source: BoM Station No. 009037)**

Receptors that may be impacted by dust emissions are nearby residents (closest 220 m east of Pits 24 & 25), workers and customers of the Liberty and AMPOL Roadhouses (6 km north-west and 3.4 km north-west of Pit 21 respectively), nearby native vegetation including TECs and priority flora and users of Brand Highway.

Dust emissions have the potential to cause adverse effects on human health and visual amenity. Elevated levels of Total Suspended Particulate Matter (TSP) are generally linked to nuisance effects such as reduced visibility and dust deposition while it is the finer fraction, particles < $PM_{10}$, that present a more significant health concern due to its ability to reach the lower respiratory tract and contribute to respiratory and cardiovascular conditions.

Given the proximity of the proposed pits to the existing mining operations, cumulative dust emissions from the premises may exacerbate local air quality degradation. This is particularly relevant where multiple sources contribute to elevated background levels of TSP and $PM_{10}$, increasing the likelihood of exceedances of ambient air quality criteria.

Dust emissions may also reduce visual amenity through haze and visible dust plumes which in turn may result in nuisance dust deposition on residential properties, vehicles and infrastructure. The potential for dust related amenity impacts is heightened during dry, windy conditions and periods of intensive earthmoving activity.

### 3.3.4 Criteria for assessment

In considering the risk to human health, the Ambient Air Quality NEPM provides a benchmark against which the risk of adverse health effects arising from exposure to $PM_{10}$ (from any source) can be assessed (but is not considered a regulatory standard). The maximum concentration standards are shown in Table 4.

**Table 4: Ambient Air Quality NEPM – Standards for pollutants**

| Pollutant | Averaging period | Maximum concentration standard | Maximum allowable exceedances |
|---|---|---|---|
| Particulates as $PM_{10}$ | 24 hours | 50 µg/$m^3$ | None |
| | Annual | 25 µg/$m^3$ | |

The Kwinana EPP also provides an equivalent ambient air quality standard and limit with respect to TSP emissions from industry. Given the siting context and distances to residential and sensitive receptors, the standard and limit set for Policy Area B (industrial premises not considered heavy industry) is considered to be the most relevant and is shown in Table 5.

**Table 5: Kwinana EPP ambient air quality standards and limits for TSP**

| Policy area | Averaging period | TSP standard | TSP limit |
|---|---|---|---|
| Area B | 24 hours | 90 µg/$m^3$ | 260 µg/$m^3$ |

### 3.3.5 Licence holder controls

As part of the application package, the licence holder proposed the following controls:

- Dust suppression will be implemented (including use of water trucks, control of vehicle movements / restricted speeds); and
- The existing requirements of L9176/2018/1.

Condition 9, Table 7 of licence L9176/2018/1 lists controls for fugitive dust emissions. The requirements of the condition are shown below in Table 6, Table 7 and Table 8.

**Table 6: Fugitive dust controls as specified in L9176/2018/1**

| Control | Actions/requirements |
|---|---|
| Topsoil stripping | • Must schedule to avoid periods of high winds from unfavourable directions relative to sensitive receptors (including the Brand Hwy);<br>• Where there is a risk of dust affecting sensitive receptors, must conduct when soil conditions are moist but not saturated; and<br>• Must cease/suspend topsoil stripping operations during high wind conditions where there is a risk of dust affecting sensitive receptors. |
| Water carts/sprays | • Must operate when discernable levels of dust are generated from ground surfaces on the premises and there is a risk of dust affecting sensitive receptors; and<br>• Must operate proactively subject to weather forecasting over a 24 hour period. |
| Dust suppressant (other than water) | • Must apply proactively to overburden/topsoil stockpiles; and<br>• Must reapply proactively subject to visual inspection and weather forecasting. |
| Cessation of activities | • Must cease an activity causing discernable levels of dust where dust management measures have not prevented dust liftoff and there is a risk of dust affecting sensitive receptors. |
| Monitoring and trigger levels | • Must use meteorological data to assist in determining the potential for high dust generating activities, and take appropriate management action(s);<br>• Must set trigger levels on ambient air quality monitoring equipment to prevent exceedances of the limits specified in Table 11 *[shown as Table 7 below]*;<br>• Must reduce the trigger levels if necessary in response to complaint or evidence of offsite impacts; and<br>• Must keep a log of dust trigger exceedance events including the identification of the sources and action(s) taken to control dust. |

**Table 7: Ambient air monitoring requirements in L9176/2018/1**

| Monitoring point reference | Parameter | Units | Frequency | Sampling duration | Limit |
|---|---|---|---|---|---|
| AQ1 – AQ2 | TSP | µg/m$^3$ | At least once every 6 days | Minimum 24 hours | 260 (upper) |
| | $PM_{10}$ | | Minimum of 2 samples, at least 4 weeks apart | Minimum 14 days continuous logging with 15 minute sample averages[1] | 50 (upper) |

**Table 8: Ambient air limit exceedance response table**

| Monitoring point reference | Event/action reference | Event | Management action |
|---|---|---|---|
| AQ1 | EA1 | Exceedance of a limit specified in Table 7 | Undertake an investigation of the exceedance, including but not limited to:<br>(a) the root cause analysis for the exceedance; and<br>(b) any common or contributory factors for the exceedance. |

### 3.3.6 Risk assessment

The delegated officer has:

- considered that the consequence to receptors, based on the closest residential receptor being located 220 m away from the proposed closest pit, exposed to dust generated from activities on the premises could have **moderate** impacts to human and environmental health and amenity;
- considered that the likelihood of impacts to receptors is **possible**. This was determined based on the short separation distance to the closest residential receptor and the direction of prevailing winds; and
- determined that the overall rating for the risk of impacts from product quality, based on a consequence of moderate and a likelihood of likely, is **medium**.

The delegated officer considers that, in considering health impacts to the closest residential receptor, the most conservative risk rating for dust emissions has been adopted.

### 3.3.7 Regulatory controls

The delegated officer notes that in the 2024 reporting period, there were no exceedances of air quality limits as specified in the licence. However, the proposed expansion of the mining area will reduce the separation distance between the proposed pits and closest residential receptor to 220 m.

It is further noted that the existing dust monitors are located in the northern portion of the premises and are not considered suitably positioned to capture dust emissions from Pits 21, 24 and 25, nor to adequately assess potential impacts to the closest residential receptor. The delegated officer has therefore conditioned that an additional dust monitor, AQ3, be placed on the boundary of the premises located between Pits 24/25 and the closest residential receptor (condition 24, Figure 2). The existing air monitoring requirements and limits in the licence have been adopted for AQ3.

The delegated officer may review the adequacy of current fugitive dust controls should monitoring data from the new location indicate exceedances of relevant dust criteria.

## 3.4 Consultation

Table 9 provides a summary of the consultation undertaken by the department.

**Table 9: Consultation**

| Consultation method | Comments received | Department response |
|---|---|---|
| Department of Mines, Petroleum and Exploration (DMPE) advised of proposal 18 August 2025 | DMPE provided an email response on 20 August 2025 stating the Mining Proposal which includes Pits 21, 24 and 25 is under assessment. | Noted. |
| Two direct interest stakeholders were advised of the proposal via mail on 18 August 2025 | None received . | N/A. |
| Licence holder was provided with draft amendment on 23 October 2025 | The licence holder provided an email response on 13 November 2025 stating that there were no comments on the draft package. | Noted. |

# 4. Conclusion

Based on the assessment in this amendment report, the delegated officer has determined that a revised licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

## 4.1 Summary of amendments

Table 10 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the revised licence as part of the amendment process.

**Table 10: Summary of licence amendments**

| Condition no. | Proposed amendments |
|---|---|
| Front cover | Inclusion of G70/277 as part of the premises details |
| 6 | Authorise Pits 24 and 25 as disposal locations for sand tailings |
| Figures 1, 3, 4 & 5 | Updated to show amended prescribed premises boundary and Pits 21, 24 and 25 |
| Figure 2 | Inclusion of AQ3 dust monitoring location and updated to show amended prescribed premises boundary and Pits 21, 24 and 25 |

# References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.