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	L8469/2010/2
Licence Holder	Galaxy Lithium Australia Limited
ACN	130 182 099
File Number	APP-0026216
Premises	Ravensthorpe Spodumene Project Newdegate-Ravensthorpe Rd RAVENSTHORPE WA 6346 Legal description – Part of Mining Tenement M74/244, G74/13 and L74/46 as defined by the map in Schedule 1 and the coordinates in Schedule 2 attached to the revised licence.
Date of Report	11 April 2025
Decision	Revised licence granted

Christine Pustkuchen

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MANAGER, RESOURCE INDUSTRIES

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

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1. Decision summary

Licence L8469/2010/2 is held by Galaxy Lithium Australia Limited (licence holder) for the Ravensthorpe Spodumene Project (the premises), located at Newdegate-Ravensthorpe Road, Ravensthorpe as depicted by Figure 1.

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 L8469/2010/2 has been granted.

Figure 1: Map depicting the premises prescribed boundary.

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 29 October 2024, the licence holder submitted an application to the department to amend licence L8469/2010/2 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The amendment being sought is for the operation of a mobile crushing and screening plant to crush and/or screen stockpiled waste rock (basalt) generated from primary mining activities.

This amendment is limited only to the incorporation of category 12 activities. No changes to the aspects of the existing licence relating to category 5 have been requested by the licence holder. Table 1 outlines the proposed changes to the existing licence.

Table 1: Proposed throughput capacity changes

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
5	2,000,000 tonnes per annual period	No change	N/A
12	N/A	80,000 tonnes per annual period	Incorporation of crushing and screening infrastructure to enable category 12 operations.

2.3 Background

Mobile crushing and screening infrastructure was initially mobilised to the premises in 2022 for the purpose of converting basalt mine waste rock into road construction materials for onsite and minor offsite civil works. The plant has since been used intermittently to process basalt waste rock into stemming aggregate for blasting, and aggregates for on-site projects i.e. hardstands and accommodation camp areas. The scale of the crushing and screening operations has since increased in scale to produce up to 50,000 tonnes per annual period (tpa).

2.4 Proposed operations

The licence holder has indicated that the category 12 crushing and screening operations will be capable of producing up to 100,000 tpa with the product used for civil construction projects, road aggregates and concrete aggregate for internal and external use. The predicted maximum throughput if the plant was operating 24 hours a day, 7 days a week, is 500,000 tpa with an actual estimated throughput limited up to 80,000 tpa. The licence holder has stated that crushing and screening operations relating to category 12 will occur during the daytime and through sporadic (campaign) operations to meet specific project demand.

The crushing and screening plant is currently operated on a hardstand approximately 4 hectares in area. Mobile equipment (a loader and an excavator) will be used to sort and transfer waste rock between local stockpiles into static and mechanical screens, into crushing circuit hoppers and for loading finished products to road haulage trucks.

The crushing and screening plant consists of the following infrastructure:

- 1x Jaw Crusher with a maximum throughput of 240 tonnes per hour (tph);
- 1x Cone Crusher with a maximum throughput of 150 tph;
- 2x Double deck screen with a maximum throughput of 240 tph;
- 1x Triple deck screen; and
- 2x Stackers.

Aspects of the mobile crushing and screening plant will be used in combinations to produce a variety of different products as presented in Table 2.

Table 2: Summary of products and equipment

Products	Equipment used
Uniformly Graded Aggregate	
• 60-100 mm;	• Static Grizzly Screens (140 mm and 250 mm); and

Products	Equipment used
• 60-150 mm; • 150-250 mm; and • > 250 mm.	• Mechanical screen decks.
Roadbase Aggregate	
• Road base (MRWA certified, <20 mm).	• Jaw Crusher – Maximus MXJ-1100; • Cone Crusher – Maximus MXC-1000; • Screen – Kleeman MS21 – double deck; and • Stackers: TEREX – 50/32 and TEREX – 60/36.
Concrete & Sealing Aggregates	
• Road sealant (MRWA certified, 7 mm, 10 mm, 14 mm); • Crusher Dust (<3 mm); and • Concrete aggregate (certified 7-10-14 mm fines & 20 mm coarse aggregate.	• Jaw Crusher – Maximus MXJ-1100; • Cone Crusher – Maximus MXC-1000; • Screen – Maximus 518T – triple deck; • Screen (sealing aggregate) – TEREX 686 – double deck; and • Stackers: TEREX – 50/32 and TEREX – 60/36.

2.5 Dust monitoring

Licence L8469/2010/2 requires the licence holder to conduct dust monitoring surrounding the premises. Current dust monitoring requirements consists of the use of 16 dust deposition gauges (DDGs) with two background locations. A single Hi-Volume Air Sampler (HVAS) unit, capable of sampling particulate matter of 10 micrometers or less (PM_{10}), is located within the town of Ravensthorpe. The locations of the dust monitoring points are presented in Figure 3. Four DDGs situated near the closest residential receptors to the site and two DDGs (DDG 17 and 20) are situated in locations where they are not influenced by potential dust emissions from the premises.

2.5.1 Dust deposition gauge monitoring

The DDGs are utilised to measure the weight and volume of deposited dust at locations monthly. It is understood that the licence holder adopts the guideline of 4 g/m^2/month (maximum) from the New South Wales Environmental Protection Agency (NSW EPA) to manage and assess their potential dust emissions. The department notes that the NSW EPA guideline value is for the assessment of amenity only and does not consider the siting of the receptor i.e. urban receptor verses rural receptor. Due to the evidence of multiple fugitive sources of dust in the environment the department has not imposed a target or limit for deposited dust.

As discussed in section 2.5 of this amendment report, the licence holder is required to operate a HVAS unit that is capable of sampling PM_{10} sized dust every one day in a six-day period. The PM_{10} sample is submitted to a National Association of Testing Authorities (NATA) accredited facility to determine concentrations of PM_{10}, lithium, manganese and zinc within the sample. The licence adopts PM_{10} concentration target of 50 µg/m^3 which is sourced from the National Environment Protection (Ambient Air Quality) Measure (NEPM) (NEPC 2021). Recent results from HV01 are presented in Figure 2, the results indicate that there has been no exceedance of the ambient air quality guideline of 50 µg/m^3.

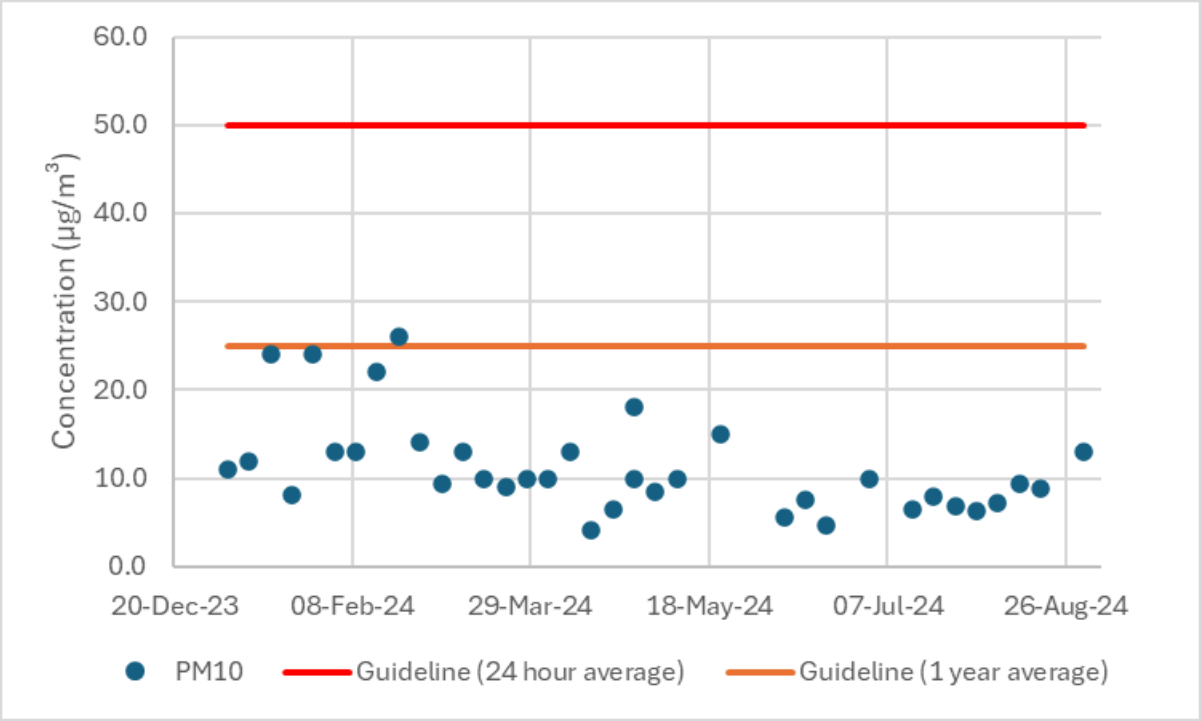

Figure 2: Reported PM_{10} concentrations at HV01 in a 24-hour period

2.5.2 Dust characteristics

Dust composition sampling for asbestos, silica and mica, as required under the existing licence, was undertaken between November 2020 and December 2024.

The summary of the results were:

- Asbestos mineral fibres were identified in five of the 22 samples, all asbestos fibres identified were classified as cleavage fragments (non-asbestiform) or were below the reporting limit. Positive detects occurred in the same sample period and was also reported in the background location (ETA 2023);
- Analysis of dust deposition for mica and respirable crystalline silica (RCS) returned positive detects in most samples but was predominantly at non-respirable particle sizes (i.e. greater than PM_{100}), with the smaller size ranges (PM_{10} and PM_4) being at trace (approximately 1% by weight) or sub-trace (less than 1% by weight) concentrations (ETA 2023);
- Crystalline silica was observed or detected in all samples. The majority were observed/reported at a non-respirable size range (>PM_{100}) while the smaller size ranges (PM_{10} and PM_4) were reported at either 1% or less; and
- Results show low concentrations of silica and mica, where high concentrations were observed these were of non-respirable fractions (>PM_{100}) and therefore of low human health risk.

The department considers the potential dust emissions from the crushing and screening of waste rock will consist of similar physiochemical parameters as of those presented within the ETA review of dust composition results (2023) and has therefore adopted those results to inform the risk assessment for dust emissions as presented in Table 5.

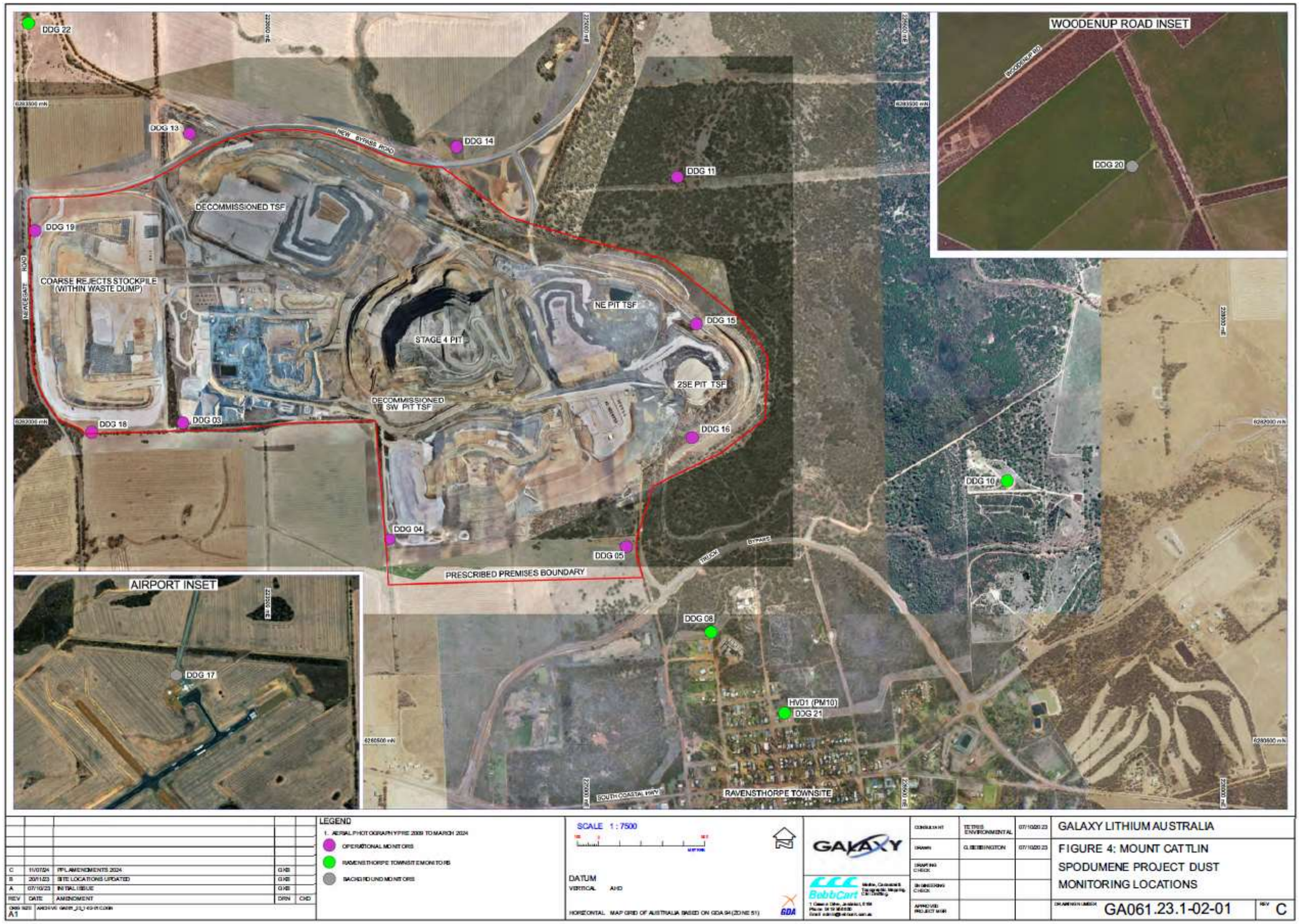

Figure 3: Dust monitoring locations as referred to licence L8469/2010/2 condition 3.

2.6 Noise emissions

The licence holder operates the premises under an existing noise management plan and intends to operate the category 12 crushing and screening plant in accordance with that plan.

The management plan includes controls and mitigation methods to reduce noise emissions from the premises such as waste rock stockpiles as acoustic barriers and use of 'broadband' reversing alarms. The licence holder has proposed to adopt category 12 crushing and screening operations being between 0700 to 1900 Monday to Saturday and 0900 to 1900 on Sundays and Public Holidays.

EPA guidance (EPA 2005) presents generic separation distances for a variety of industrial activities and the recommended buffer distance between those activities and sensitive land uses (i.e. residential dwellings). The buffer area is to avoid or minimise the potential for land use conflict impacting amenity between the activity and nearby sensitive receptors. The EPA default distances for crushing and screening activities (extractive industries) is 1.0 km. It's noted that this distance is a default general distance and does not take into account cumulative impacts, potential health impacts from emissions and non-typical emissions.

The licence holder has provided the sound power level on the nameplates of the crushing units (Maximus MXJ-1100 and Maximus MXC-1000) with a power level of 100 dB LWA (i.e. 100 db(A) which is indicative of a smaller sized crushing and screening operation. The licence holder has proposed that the presence of landforms including the elevated profile of Waste Dump 1 (WD1) (Figure 4) situated between the emission source and the nearest sensitive receptors would reduce noise impacts to nearby sensitive receptors.

The department's assessment of the noise emissions and potential impacts of identified receptors are presented in Table 5 of this amendment report.

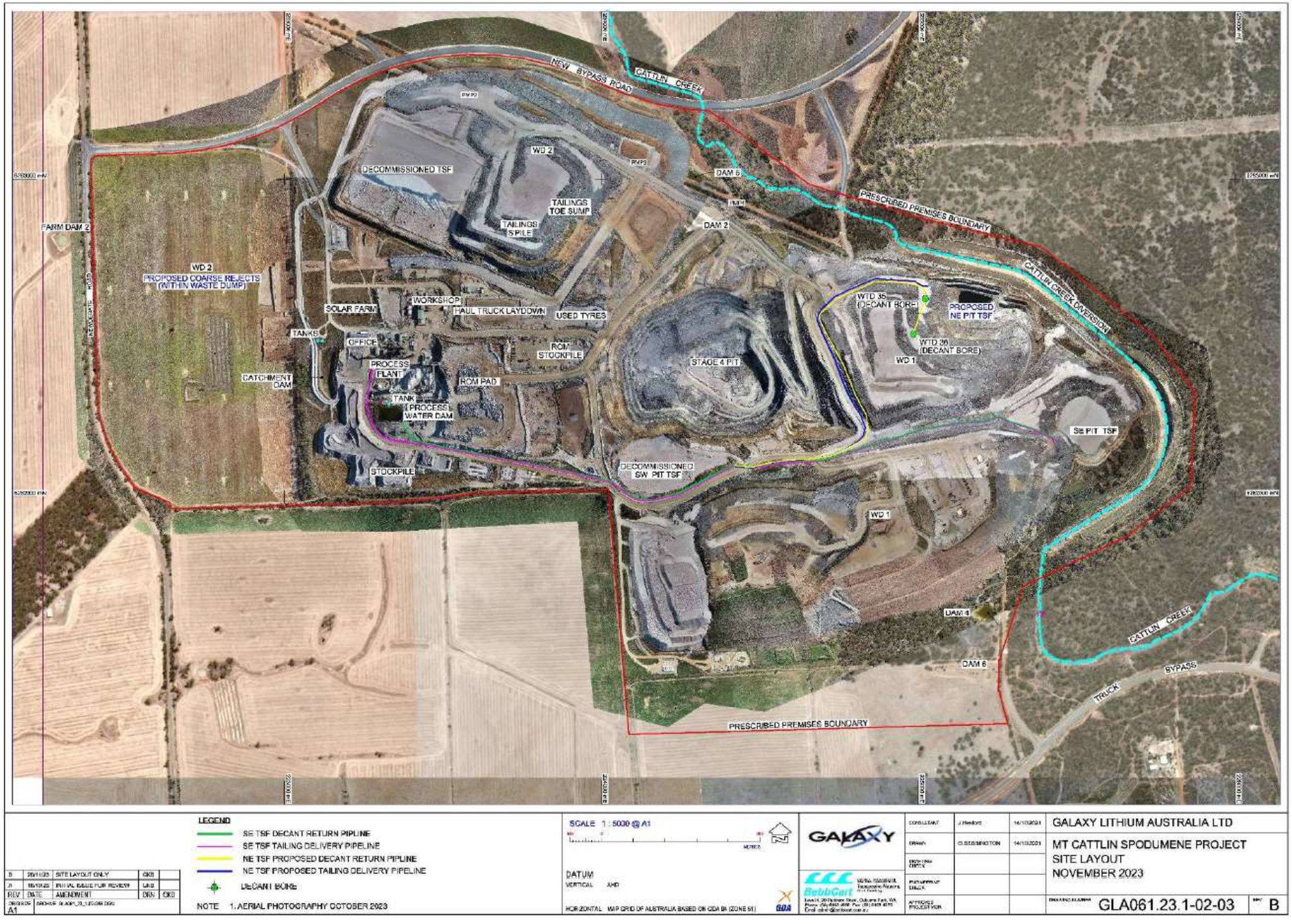

Figure 4: WD1 location (sourced from Galaxy 2023)

2.7 Meteorological data

The licence holder is required to operate and maintain an onsite weather station in the management of potential dust emissions from the premises and identify the potential source of emissions within DDG monitoring stations.

Figure 5 presents wind direction and windspeed for the annual average from 2011 to 2016. Results indicate that windspeed tends to be greatest from the westerly to northwesterly direction and the prevailing wind direction comes from the east and southeast. The closest sensitive receptors identified within this amendment report are presented in Figure 7. Two sensitive receptors (R1 and R2) are located southeast of the crushing and screening plant (Figure 5) which is the historical predominant wind direction. The third sensitive receptor (R3) is located northwest of the crushing and screening plant (Figure 5).

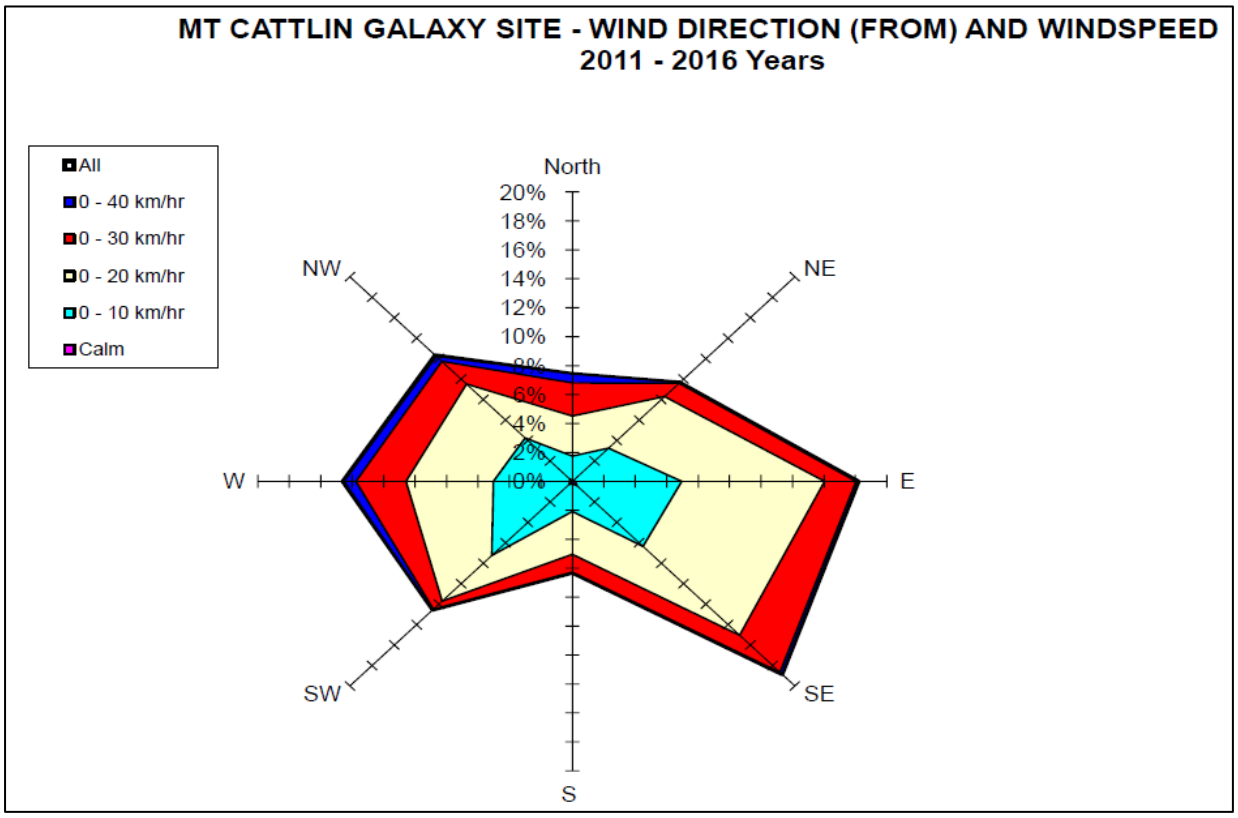

Figure 5: Mt Cattlin annual average wind speed and directions (sourced from Galaxy 2020)

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 operation which have been considered in this amendment report are detailed in
Table 3 below. Table 3 also details the proposed control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

Table 3: Licence holder controls

Emission	Sources	Potential pathways	Proposed controls

Dust	Handling, storing and crushing/screening of material, vehicle movements, lift-off from stockpiles and/or stored product, earthworks etc.	Air/windborne pathway	• Spray bars /nozzles fitted and used on crushing and screening circuits;
			  ○ Freshwater sourced from Hopetoun standpipe.
			• Dust suppression via water to unsealed roads, hardstand areas as required;
			• Adoption of Mt Cattlin Project Airborne Materials Management Plan (AMMP). Controls that are relevant to the proposed category 12 crushing and screening operations include:
			  ○ Dust monitoring including DDGs and HVAS (PM_{10}) sampling;
			  ○ Dust Trigger Action Response Plan (TARP) which provides a visual trigger in order to implement dust control measures within the work area;
			  ○ Road maintenance, dust suppression and application of surface control products; and
			  ○ Water truck used to spray water onto broken rock material as necessary.

Noise	Handling, crushing and screening of material, vehicle movements (including reversing alarms)	Air/windborne pathway	• Plant located within an active mine site; • Non-tonal broadband reversing alarms on vehicles; and • Operations limited to between 0700 – 1900 Monday to Saturday and 0900 – 1900 Sunday and Public Holidays.
Sediment laden stormwater	Rainfall	Overland runoff	• Surface water drainage to be directed via swale drain to NE Pit void (Figure 6); and • Plant situated on broken waste

Emission	Sources	Potential pathways	Proposed controls
			rock increasing infiltration through profile to the groundwater depression and catchment associated with nearby open pits.
Hydrocarbons	Crushing and screening plant or supporting equipment or infrastructure.	Overland runoff and infiltration	• Waste oil stored in a dedicated Intermediate Bulk Container (IBC) located undercover and within a secondary containment pallet (IBC bund); • Refueling from service truck with a 1,800-L self-bunded tank; and • A spill kit to be located within workshop area.

Figure 6: Swale drain and Cattlin Creek location (Sourced from Galaxy 2024)

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 4 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)).

The recommended separation distance for crushing and screening operations provided within

the EPA's *Guidance for Assessment of Environmental Factors – Separation Distances between Industrial and Sensitive Land Uses, or department agreed alternative* is 1 km.

Table 4: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	**Distance from prescribed activity**
Residential premises (Figure 7)	• The nearest residential dwelling (R2) is located approximately 1.9 kms southeast of the proposed crushing and screening plant location; • Residential dwelling (R1) is located approximately 2.0 km southeast of the crushing and screening location; and • Residential dwelling (R3) is located approximately 2.4 km northwest of the crushing and screening location.
Environmental receptors	**Distance from prescribed activity**
Bee hives	Hives are estimated to be located approximately 2.8 km southeast of the crushing and screening plant.
Native vegetation	Remnant native vegetation located approximately 115 m northeast of the crushing and screening plant.
Cattlin Creek and potential downgradient surface water receptors	An ephemeral creek (Cattlin Creek) is located immediately north, east and south of the prescribed premises. The ephemeral creek flows from the north to the southeast passing 280 m northeast of the crushing and screening plant location. The department has been informed that people and fauna utilise the water runoff generated from Cattlin Creek when it flows, therefore downstream receptors (people, fauna and vegetable gardens) have been included within the Cattlin Creek receptor.
Groundwater	Regional groundwater is saline to hyper saline (10,000 – 40,000 mg/L total dissolved solids (TDS)). Groundwater in the newly installed monitoring bores surrounding the NE TSF (MB22-24) ranged from 15.3 to 52 meters below ground level (mbgl) (Arcadium 2023) are located approximately 600 m from the category 12 crushing and screening plant. Groundwater samples collected in 2023 recorded a pH between 3.7 (MB19) and 7.6 (WTD13), and TDS ranged from 11,610 to 39,900 (WTD07) mg/L (indicating high to hypersaline conditions).

Figure 7: Distance to sensitive human 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 incomplete 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 5.

The revised licence L8469/2010/2 that accompanies this amendment report authorises emissions associated with the operation of the premises i.e. crushing and screening activities.

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

Table 5. Risk assessment of potential emissions and discharges from the premises during 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**				
Screening, crushing, unloading, loading, storage of material and vehicle movements	Dust	**Pathway:** Air/windborne pathway **Impact:** Human **h**ealth and amenity, bee hive health and reduced surface water quality resulting in impacts to ecosystem function and human health	• Residential residences (1.9 to 2.4 km) • Bee hives (2.8km away)	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 1.2.10 – Operational requirements; Condition 2.1.1 – Dust emission controls; Condition 2.1.2 – Water and dust suppressants operation requirements; Condition 3.2.1 – Monitoring amount of material crushed and/or screened; Condition 3.5.1 – Dust and wind monitoring requirements; and Condition 3.5.2 – Investigation requirement for exceedance of target dust concentration.	The department has considered the following information to assist in the determination of potential risks to nearby receptors: • The proposed maximum throughput of 80,000 tpa; • Recent dust monitoring requirements (section 2.5); • Historical meteorological data (section 2.7); and • The licence holders proposed controls (Table 3). The department notes that this risk assessment is limited to only the crushing and screening operation (category 12 activities) and does not include the overall operation of the premises. Any additional dust emissions associated from the crushing and screening operations are unlikely to significantly increase dust emission impacts at nearby receptors. The department considers current and proposed conditions and/or controls are suitable to manage dust emissions from the crushing and screening operations. The licence holder's dust management controls have been conditioned within the licence.
			• Cattlin Creek and potential downgradient surface water receptors (280 m)		C = Minor L = Unlikely **Medium Risk**	Y		The delegated officer considers that dust emissions are unlikely to impact Cattlin Creek and potential downstream receptors due to the ephemeral nature of the creek and the licence holder's proposed controls. The licence holder's proposed dust management controls have been conditioned within the licence.
	Noise	**Pathway:** Air/windborne pathway **Impact:** Health of receptors and amenity	• Residential residences (1.9 to 2.4 km)	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 1.2.10 – Operational requirements (including daytime operations); Condition 1.2.15 – Noise attenuation infrastructure requirements; Condition 3.2.1 – Monitoring amount of material crushed and/or screened; and Condition 3.5.1 – Wind monitoring requirements.	The separation distance for extractive industries (crushing and screening) has a buffer distance of 1.0 km (EPA 2005). The closest residential receptor to the crushing and screening plant is approximately 1.9 km away, exceeding the minimum buffer distance requirement. The delegated officer considers that as the minimum buffer distance has been met and in conjunction with the licence holders controls, it is unlikely that noise emissions from the crushing and screening plant will exceed the assigned noise levels as outlined in the Environmental Protection (Noise) Regulations 1997 (Noise Regulations) at residential receptors. To ensure compliance with Noise Regulations, the delegated officer has included an operational requirement for the crushing and screening plant to only be between 0700 to 1900 Monday to Saturday and between 0900 to 1900 Sunday and Public Holidays. The licence holder is required to comply with the *Environmental Protection (Noise) Regulations 1997.*
	Sediment laden stormwater	**Pathway:** Overland runoff **Impact:** Reduced stormwater water quality resulting in impacts to ecosystem function	• Native vegetation (115 m) • Cattlin Creek and potential downgradient surface water receptors (280 m)	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 1.2.16 – Operational requirements.	The delegated officer has considered the current licence conditions and the licence holder's stormwater management controls (swale drain) and has determined that low level onsite impacts will occur from sediment laden stormwater and impacts to offsite receptors (Caittlin Creek) is unlikely. No additional regulatory conditions have been included within the licence as part of this licence amendment.

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**				
Spills / leaks of hydrocarbons from the operation of crushing and screening plant and the storage of hydrocarbons in an IBC	Hydrocarbons	**Pathway:** Overland runoff **Impact:** Reduced surface water quality resulting in impacts to ecosystem function **Pathway:** Infiltration into groundwater **Impact:** Reduced groundwater quality resulting in impacts to ecosystem function	• Native vegetation (115 m) • Cattlin Creek and potential downgradient surface water receptors (280 m) • Groundwater (15 – 52 mbgl)		C = Slight L = Unlikely **Low Risk**	Y	N/A	The delegated officer considers that the emission can be adequately regulated under the general provisions of the EP Act.

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. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 6 provides a summary of the consultation undertaken by the department.

Table 6: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal on 16 December 2025	No response received	N/A
Five direct interest stakeholders were advised of proposal on 16 December 2024	One stakeholder responded with concerns regarding: 1. Concern over where the water for dust suppression will be sourced from; 2. Concern over the potential contamination of Cattlin Creek and impacts to receptors further down the creek; 3. Concern over no applicant engagement regarding this licence amendment proposal; 4. Concern over dust and stormwater runoff emissions impacting receptors; 5. Unable to contact the mine to report concerns over dust pollution; 6. Loss of beehives due to pollution from the premises; 7. Potential dumping of tailings offsite; and	1. Water proposed to be used for dust suppression relating to the crushing and screening plant is sourced from the Hopetoun standpipe (groundwater). 2. The department has included Cattlin Creek and has included potential downstream receptors as a potential receptor as presented in Table 4. Table 5 presents the risk assessment for potential impacts to identified receptors and the licence holders controls for this licence amendment relating to category 12 crushing and screening activities. 3. Applicants are encouraged to engage with the community regarding new and planned proposals. It is, however, not a legal requirement for the applicant/instrument holder when applying for an amendment under Part V Division 3 of the EP Act. Identified direct interest stakeholder's were contacted by the department during the assessment process. 4. Potential dust and stormwater runoff emissions have been considered in the department's risk assessment within section 3 of this amendment report. 5. This licence amendment is limited to category 12 crushing and screening operations and has not re-assessed the wider mine activities. Licence L8469/2010/2 requires the licence holder to maintain a complaints management system that records the number and details of complaints received concerning the environmental impact of activities undertaken at the premises. The department operates a 24/7 complaints reporting system, Environment Watch, where anyone can lodge an environmental complaint. Environment Watch can be accessed via the

	8. Concerns over licence holder's self-regulation.	department's website: https://www.wa.gov.au/service/environment/pollutant-prevention/environment-watch 6. The department has included the beehives as a potential receptor and is presented in Table 4 and Table 5 of this amendment report. It's noted that assessment of the impact to bee hives is limited to the operation of category 12 crushing and screening operations. 7. This licence amendment is limited to category 12 crushing and screening operations and therefore has not re-assessed tailings management. Licence L8469/2010/2 requires the licence holder only discharged tailings to a tailings storage facility. The licence holder has previously informed the department that tailings generated from the operations are a fine-grained slurry and that coarse material (>6 mm) is waste rock. 8. The licence holder is required to submit an annual audit compliance report and annual environmental report to the department. The department reviews annual reports to determine the licence holder's compliance with licence conditions. The department regulates licensed premises in accordance with the published *Compliance and Enforcement Policy*, May 2021.
Licence holder was provided with draft amendment on 17 March 2025	The licence holders response was received by the department on 9 April 2025. Refer to Appendix 1	Refer to Appendix 1.

5. 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.

5.1 Summary of amendments

Table 7 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 7: Summary of licence amendments

Condition no.	Proposed amendments
Throughout licence	Minor administrative amendments throughout licence, no change in operational requirements.
Front Page	Minor administrative amendments on front page.
	Inclusion of prescribed premises category descriptions from Schedule 3.
	Inclusion of category 12: Screening etc. of material with an assessed production capacity of 80,000 tonnes per annual period.
Condition 1.1.2	Updated definition meanings within the licence.
(new) Condition 1.2.10 (Table 1.2.2)	Included an Infrastructure and equipment operational requirements table. Included within the table is: crushing and screening plant and its associated infrastructure, swale drain, stormwater management, catchment dam and process water dam, pipelines containing tailings or product.
Condition 1.2.11	Included condition to require the licence holder to conduct an audit of the crushing and screening plant to meet the operational requirements of condition 1.2.10.
Condition 1.2.12	Included a requirement for the environmental compliance report required for the crushing and screening plant is to be: certified by either a professional engineer or professional operator, contain photographs or as constructed plans and signed by a person authorised to represent the licence holder.
Condition 1.2.13 and 1.2.14	Excluded category 12 activities from requiring notification for night time operations and excluded category 12 activities from operating over an eight month period.
Condition 3.2.1 (Table 3.2.1)	Included the requirement to monitor total weight of waste rock crushed and/or screened per annual period.
Condition 4.2.2	Removed the requirement for the licence holder to submit changes to site boundaries, location of groundwater monitoring bores, discharges to surface drainage channels and on-site or off-site impacts or pollution from the Annual Environmental Report. This requirement is outdated and redundant, changes to site boundaries and groundwater monitoring bores should occur through a licence amendment. Discharges to surface drainage channels and on-site or off-site impacts or pollution is not authorised and requirements is covered under section 72 of the EP Act. Removed requirement for the licence holder to submit “any relevant process, production or operational data recorded under condition 3.1.4” The condition is a

	redundant condition as condition 4.2.1 already requires this information.
Schedule 1, Figures 6 and 7	Included figures showing location of crushing and screening plant and swale drain.
Schedule 3	Removed Schedule 3: Prescribed Premises Categories and have incorporated category into the front page of the licence.

6. References

1. Arcadium Lithium 2023, Mt Cattlin Spodumene Project: 2023 Monitoring Bore Completion Report.
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
5. DWER 2021, Draft *Guideline: Assessment of environmental noise emissions,* Perth, Western Australia.
6. Environmental Protection Authority (EPA) 2005, *Guidance for the assessment of Environmental Factors (in accordance with the Environmental Protection Act 1986)* Separation Distances between Industrial and Sensitive Land Uses, No. 3.
7. ETA 2023, Mt Cattlin Spodumene Project: Ambient Air Monitoring Program – Review of Dust Composition Results.
8. Galaxy 2020, Mt Cattlin Project Airborne Management Plan.
9. Galaxy 2023, Mt Cattlin Operations, Licence Amendment Supporting Document for L8469/2010/2, dated 6 December 2023.
10. Galaxy 2024, Prescribed Premises Licence L8469/2010/2 Amendment Application (Category 12: crushing & screening activities), Supporting Report & Attachments.
11. M. Beekman & F.L.W. Ratnieks 2001 Long-range foraging by the honey-bee, *Apis mellifera L.* Published in Functional Ecology, Volume 14, Issue 4.
12. National Environment Protection Council (NEPC) 2021, National Environment Protection (Ambient Air Quality) Measure.
13. New South Wales EPA (NSW EPA) 2016, *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales,* Sydney, NSW. Amended 2022

Appendix 1: Summary of licence holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response
Condition 1.2.10, Table 1.2.2	Licence holder provided detailed clarification on location of spray bars situated within the crushing and screening plant.	Added the location of the spray bars to the licence.
Appendix 1, Figure 7	Licence holder has provided an updated figure of the swale drain and Cattlin Creek.	Added the updated figure to the licence.
Amendment report	Licence holder has provided clarification to the background and history of the crushing and screening plant.	Edited the background of the crushing and screening plant in the amendment report.
	Licence holder has provided additional proposed controls for hydrocarbon emissions.	Edited the proposed controls table in the amendment report.