Government of Western Australia
Department of Water and Environmental Regulation

Amendment Report

Licence Amendment

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

Licence Number	L5099/1974/14
Applicant	Southern Ports Authority
File number	INS-0001178 / APP-0032538
Premises	Port of Esperance The Esplanade and Bower Avenue ESPERANCE WA 6450 Legal description: Part of Crown Reserve 28207 Certificate of Title Volume 3127 Folio 354 As defined by the premises maps attached to the issued licence
Date of report	30 April 2026
Proposed Decision	Licence granted

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

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1. Decision summary

Licence L5099/1974/14 is held by Southern Ports Authority for the Port of Esperance (the premises), located at The Esplanade and Bower Avenue, Esperance Western Australia. The premises is part of the Esperance township.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to emissions and discharges during the operation of the Premises. As a result of this assessment, revised Licence L5099/1974/14 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this amendment report, the Department of Water and Environmental Regulation (the department; DWER) 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 Application summary

On 20 November 2025, Southern Ports Authority (the Licence Holder, SPA) submitted an application for a licence amendment to the department under section 57 of the *Environmental Protection Act 1986* (EP Act). The premises relates to the categories 58, 58A and 82 and assessed production / design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L5099/1974/14.

The application seeks to amend the existing licence (L5099/1974/14) as follows:

- Adjust the premises boundary to support relocation of the boat maintenance area and remove an area not associated with prescribed activities.
- Remove the specified criteria for muscovite content in spodumene accepted on the premises.
- Update conditions associated with Hume Interceptors to account for the upgraded stormwater infrastructure installed in 2023.
- Update terminology around “respirable silica” and other administrative changes.

The Licence Holder has also submitted a request to the CEO of the department under section 47A of the EP Act for the withdrawal of Ministerial Statements 325 and 681 (MS325 and MS681). The assessment of the request to withdraw MS325 and MS681 is separate from this licence amendment application. To support the removal of the Ministerial Statements, the Licence Holder has also requested, as part of this application, that new conditions are included on the licence relating to managing iron ore dust.

2.2.1 Changes to premise boundary

Figure 2 details proposed changes to the premise boundary (shown in red) relating to the new boat maintenance area (point 3) and new port access road (point 13).

Figure 1: Proposed changes (shown in red) to the existing Southern Ports Boundary shown in green.

Boat maintenance area

SPA currently maintains an approved boat maintenance area at the eastern end of Berth 2, authorised under Category 82 (Boat building and maintenance) and operating in accordance with the controls specified in licence L5099/1974/14.

SPA currently owns and operates two work vessels and one pilot vessel which need to be antifouled annually and regularly maintained. Current boat maintenance activities include:

- removing biofouling
- removing and reapplying anti-fouling paint
- general vessel maintenance and mechanical maintenance.

The current location at Berth 2 is no longer suitable due to operational and maintenance priorities as the area is required to support cargo-handling activities. SPA proposes relocating the boat maintenance area to a site north of Shed 2 (refer to Figure 2). This change will require an extension of the existing prescribed premises boundary to incorporate the new location.

According to the application, the proposed new location provides environmental management benefits when compared with the existing site, including:

- Improved runoff containment: The new area does not contain service pit lids that require sealing or additional impermeable measures, such as the use of tarpaulins which is currently required by the licence at the existing facility. The new facility features a sealed, bunded, and contoured hardstand that directs washdown flows to a 1 m³ sediment trap, ensuring effective containment and recovery of hull fouling residue

and anti-fouling material.

- Enhanced stormwater management: The presence of a dedicated 1m³ stormwater pit, incorporating a geotextile-filtered grated lid, enables improved capture of particulates and washwater, thereby reducing the risk of contaminated discharge to the marine environment and improving waste-stream control.

Figure 2: Proposed modification to boundary (blue polygon) to encompass proposed boat maintenance area (red polygon) west of Berth 1.

Public access roundabout area

An area previously utilised for the storage and servicing of front-end loaders associated with bulk iron ore operations has been decommissioned for that purpose and subsequently repurposed. The site has been sealed and assessed as suitable for conversion into a port access road and roundabout, now referred to as Hughes Road (refer to Figure 3).

Hughes Road functions as a public access route to the Port and the adjacent Tommy Windich cultural precinct, accommodating both light vehicles and heavy-vehicle traffic. This area, together with the remainder of Hughes Road, no longer supports any prescribed activities and is now considered a public road access point situated outside the Port Security controlled area and utilised as a truck turnaround zone.

The Licence Holder has advised that construction of the new road access was completed in October 2025.

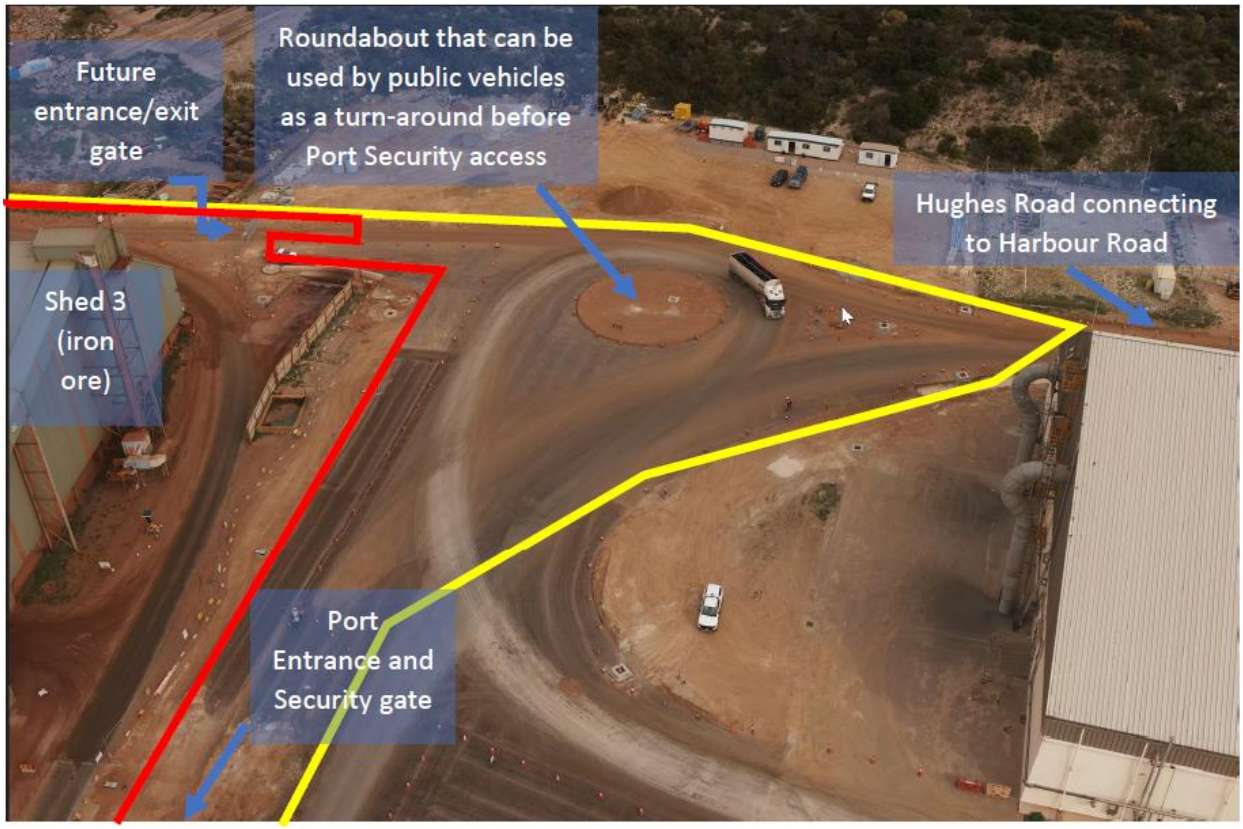

Figure 3: Upgrades to Hughes Road access to the Port of Esperance. Note red line shows approximate location of proposed new boundary with yellow line being the existing boundary.

2.2.2 Changes to stormwater infrastructure

The Licence Holder requested to amend conditions associated with existing stormwater management infrastructure which comprises of Hume Interceptors and a StormDMT (Dissolved Metals Treatment) filter system. Stormwater at Berth 2 was previously managed through the operation of three Hume Interceptors (H2, H3, and H4 shown in Figure 4), whereby potentially contaminated stormwater was directed to the Hume Interceptors prior to discharge to the marine environment. Construction of an upgraded stormwater system, incorporating the StormDMT, was authorised under an amendment to the licence granted on 1 October 2018.

The works involved recontouring Berth 2 so that surface flow is redirected west to east to a 200m^3 First Flush Tank (FFT) before flowing through the StormDMT filter system for treatment. The upgrades resulted in surface water flowing away from the existing Hume Interceptors 2 and 4 (see Figure 5) that now sit outside the catchment area used to handle containers of copper. There are two monitoring points on the current licence (L5099/1974/14) associated with discharge from the StormDMT; at the input at the First Flush Tank (FFT) and at the existing Hume Interceptor 4 (H4) through which filtered water from the StormDMT is discharged.

The StormDMT filtration system provides a higher treatment capacity for the removal of dissolved metals and suspended solids from stormwater prior to discharge, when compared with the existing Hume Interceptor infrastructure. Compliance documents confirming that the works had been completed were received by the department on 11 October 2023, and operating of the infrastructure subsequently incorporated onto the icence.

Through its assessment of the stormwater upgrades (DWER 2018), the department concluded that, once operational, the StormDMT filtration system was expected to reduce dissolved

copper concentrations in stormwater discharges. Monitoring data indicated that copper concentrations measured at Hume Interceptors 2 and 4 generally remained below the adopted target levels since 2018. Concentrations of copper are likely to remain low since Hume Interceptor 4 now receives water treated by the FFT and StormDMT.

The Licence Holder has requested the following amendments to be made to the licence to accommodate the changes in the onsite stormwater management practices:

- remove requirements to empty Hume Interceptors 2 and 4;
- remove the condition requiring a log of times Hume Interceptors 2 and 4 are emptied; and
- amending conditions relating to reporting the logbook records.

Requirements to monitor the quality of stormwater within Hume Interceptors 2 and 4 is to be retained on the licence.

The delegated officer notes that risks associated with stormwater management at Berth 2 have been previously assessed and that the proposed changes to stormwater conditions do not alter the existing risk profile. Accordingly, the delegated officer does not consider it necessary to reassess stormwater-related risks.

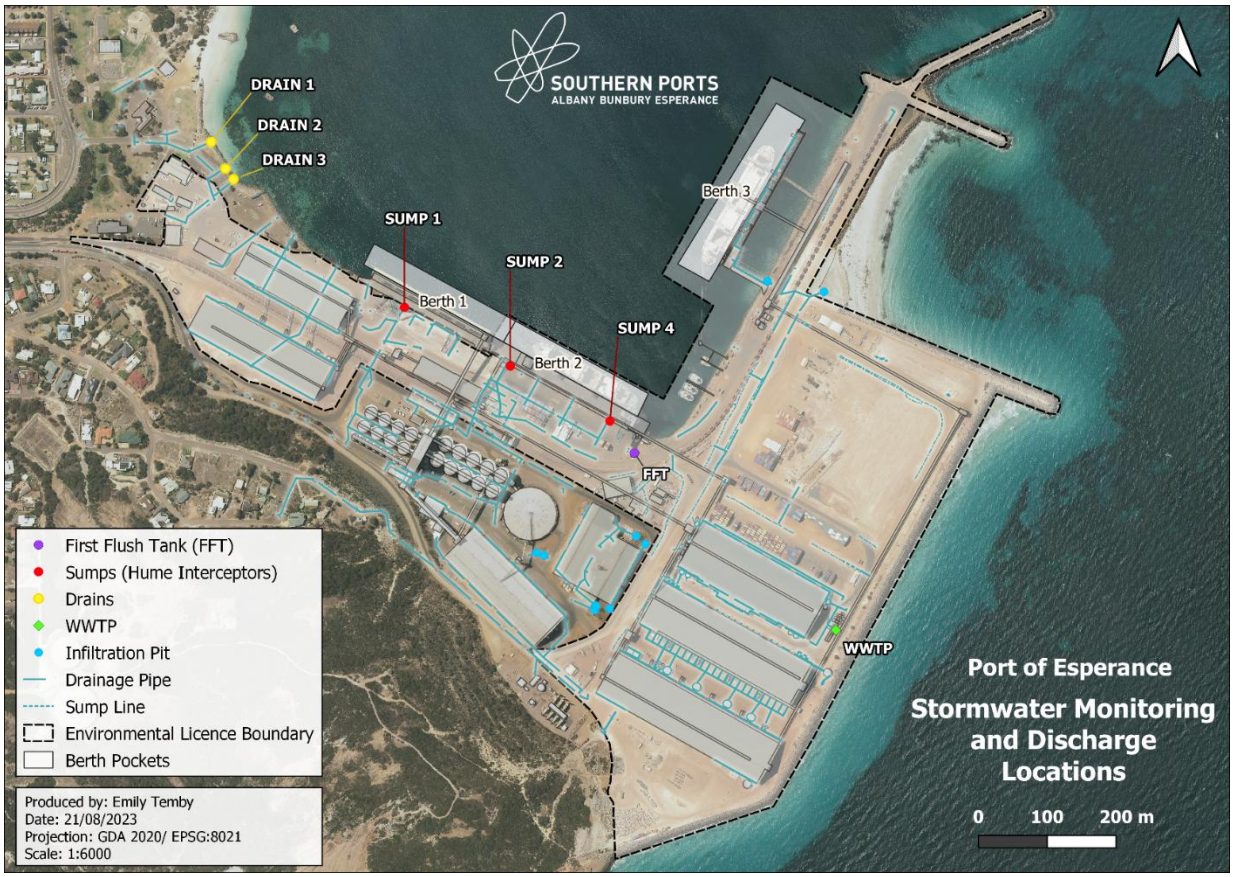

Figure 4: Stormwater monitoring and discharge network

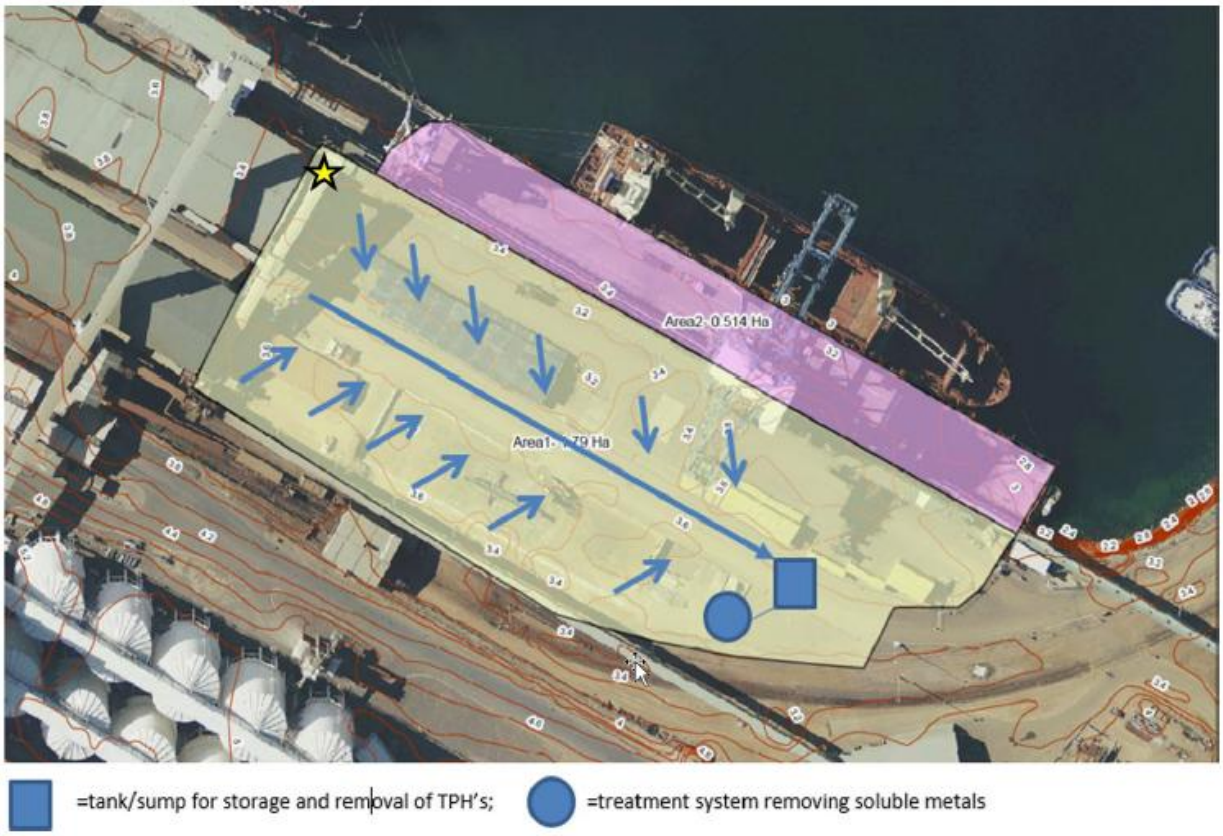

Figure 5: Surface water in copper container handling areas (Areas 1 and 2) flows away from Hume Interceptor 2 (☆) towards StormDMT System at east end of Berth 2.

2.2.3 Increases to fertiliser throughput

The Licence Holder proposes to increase the assessed throughput of fertiliser from the current 500,000 tonnes per annum (tpa) to 800,000 tpa. No change to the daily maximum throughput of 100,000 tonnes/day for Category 58 will occur as a result of this change.

Forecast operational demands indicate that annual fertiliser imports are expected to exceed 500,000 tpa within the next three years. Growth projections further indicate that the amended throughput limit of 800,000 tpa is likely to be required within five years.

Fertiliser is currently unloaded using a four-tonne grab that loads product directly into the bin of a truck via a hopper. Product is able to be transferred to Shed 6 for storage using trucks, with product handling inside the shed occurring using front end loaders.

In accordance with conditions of the licence, the Licence Holder submitted a trial notification to the Department on 1 April 2025 seeking authorisation to trial modifications to the handling methods for the bulk import of fertiliser at Berth 2 to support increased fertiliser throughputs. The trial involved the use of a larger 20-tonne grab operated by a fixed harbour crane (hybrid container crane) to unload bulk fertiliser via a fixed hopper into an existing conveyor circuit, which transfers product directly into Shed 5, where it is subsequently outloaded by truck. The conveyor circuit forms part of the existing sulphur handling circuit.

The Licence Holder stated that use of the fixed harbour crane allows for more accurate transfer of material compared to using the vessel's crane equipment, which is subject to movement in high ocean swells. The larger grab bucket also allows for less grab movements and therefore considered to reduce the risk of product spillage.

Trial results

In accordance with requirements of the licence, a four-month trial report was submitted on 18 September 2025. Three shipments were received during the initial period of the trial (May to July 2025). No further shipments of fertiliser occurred between months 4 and 10, however regular shipments recommenced in March 2026.

Ambient air quality monitoring was undertaken during the trial period to determine dust emissions associated with the modified handling method. Continuous particulate measurements (as 24-hour averages) are captured at four monitoring stations (Sites 1- 4, Figure 6) in accordance with licence requirements. 10-minute data is also captured using E-Sampler monitors, including at a location directly adjacent to Berth 2.

The *National Environment Protection (Ambient Air Quality) Measure 2021* (DCCEEW 2021), specifies that the maximum concentration for particulates (as PM_{10}) over a 24-hour period is 50µg/m^3. The Licence Holder reported that, for the initial trial period, particulate emissions were generally below 50µg/m^3 at the monitoring locations with the exception of a marginal exceedance (50.5µg/m^3) reported during unloading of the first shipment of fertiliser on 29 May 2025. Following a review of monitoring data, the Licence Holder attributed the exceedance to grain vessel loading that was occurring at Berth 1 at the same time (Southern Ports 2025a).

With regards to management of spills and potential contaminated runoff, the Licence Holder also reported that the trial resulted in reduced potential for material entering the adjacent marine waters. This is a result of the improved stormwater network (described in section 2.2.2 above) as well a reduction in spillage associated with the new handling method, which provides more accurate grab movements and less grab movements due to the larger capacity of the fixed grab crane. Use of the existing conveyor network also removes the need for trucks trafficking the Berth and thereby reducing potential for spillage to be mobilised through wheel carriage. Results of monitoring stormwater discharge conducted in accordance with existing licence conditions confirmed that concentrations of ammonia and total nitrogen are below historical levels.

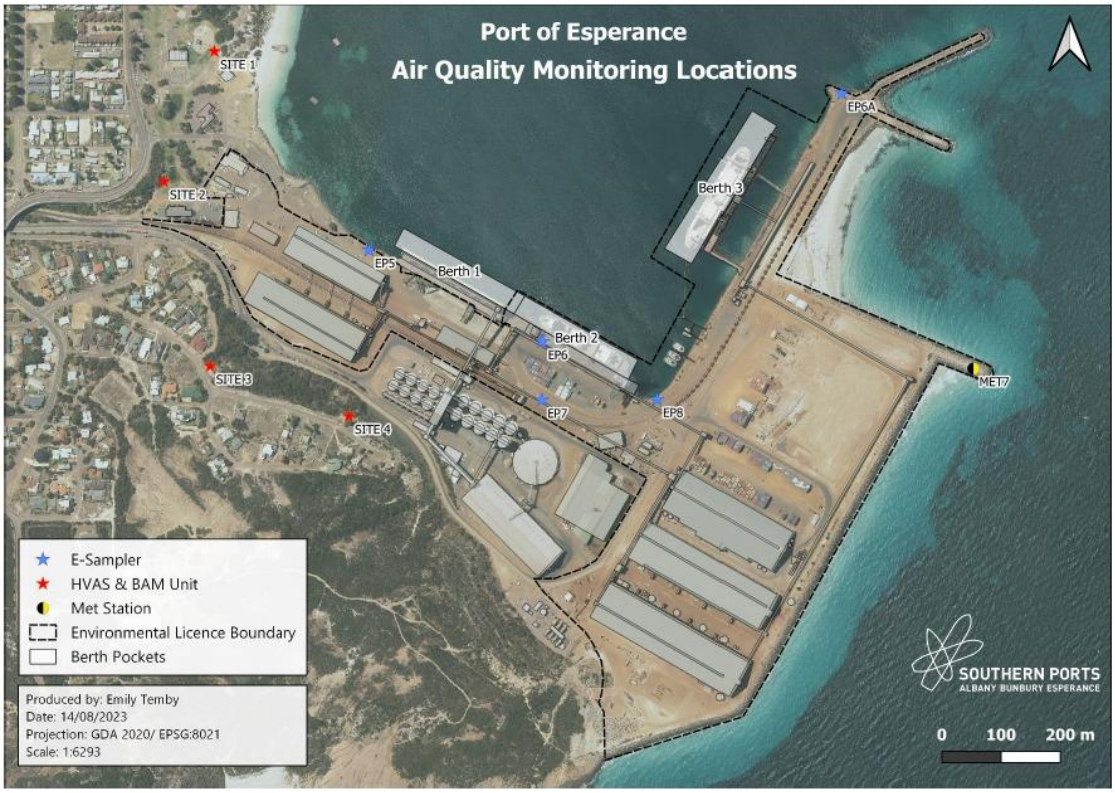

Figure 6: Location of ambient air quality monitoring stations.

2.2.4 Removal of muscovite (mica) criteria

The licence currently includes a limit on the content of muscovite (mica) in spodumene product, requiring that mica levels remain at or below 5% by weight. As part of this amendment application, the Licence Holder has requested that the mica limit be reconsidered and removed from the licence. Data provided to the Licence Holder by the mine operators indicates that particular spodumene products are not able to achieve the 5% mica criteria, with results obtained through the 2024-2025 reporting period showing that mica content in spodumene products ranged between 5.15% and 8.94%.

Previous assessments undertaken by the department (DWER 2018b and DWER 2020c), determined crystalline silica and mica as key hazards associated with spodumene dust, stating that mica is “a non-toxic, non-fibrous silicate that can be abrasive when inhaled, having the potential to irritate eyes and skin as well as causing scarring of the lungs following repeated and high exposure” (DWER 2020c).

The Licence Holder previously submitted an application to the department requesting the mica limit be increased from 5% to 10%, on the basis that 10% is operationally manageable without demonstrated occupational health and safety or trade impacts. In its assessment (DWER 2020c), the department concluded that while crystalline silica and muscovite are recognised hazards associated with spodumene dust, given the variability in ore geology and that spodumene loading uses an unenclosed handling system at Berth 3, the department considered offsite dust emissions to be a possible risk and determined not to increase the mica limit at that time. Dust monitoring requirements were expanded to better characterise potential risks, with the suite of sampling extended from PM_{10} and select metals, to include a full suite of metals and metalloids.

As a measure of mitigating dust risks, the amount of fines (particles less than 10 µm diameter, PM_{10}) allowed in spodumene handled at the port is limited by the licence to 3%. Particle size distribution (PSD) data provided in the annual monitoring report required by the licence (Southern Ports 2025b) indicate that spodumene products contain less than 0.34% of respirable particulates sized less than 4µm (PM_4), with less than 1% smaller than 10µm.

The application also states that results of ambient air quality at the border of the premises and the community suggest there is no significant upward trend in lithium PM_{10} dust despite exports doubling from 0.46 million tonnes per annum (Mtpa) in 2018/19 to 0.91 Mtpa in 2023/24. It is evident from these results (Southern Ports 2025b) that lithium dust (as PM_{10}) remains below 0.01µg/m^3 at monitored sites.

The Licence Holder advised that additional loading controls have been implemented since 2020 to further reduce risks associated with mica dust:

1. Trucks leaving spodumene Shed 4 must pass through a wheel wash facility that automatically activates water sprays.
2. The exit road from Shed 4 is now sealed enabling thorough wet sweeping in the unlikely event of any spodumene material, including mica, escaping past the wheel wash.

Advice has been sought from DoH relating to the removal of the mica criteria. Consistent with previous advice provided, DoH confirmed that there is no evidence that mica poses a more significant risk to human health than normal rock dust except in situations of high and prolonged exposure, which may correspond with some occupational settings. DoH indicated no objection to the removal of the criteria for mica noting the monitoring and management measures already in place relating to dust, which would also address any muscovite particle emissions, and the frequency and duration of relevant ship onloading activities. It was suggested that reporting muscovite concentrations in spodumene would be beneficial, particularly to support worker protection measures should concentrations reach elevated levels (e.g. above 10%).

2.2.5 Conditioning supporting the removal of Part IV Ministerial Statements

The premises is currently subject to conditions under Part IV of the EP Act under the following Ministerial Statements (MS):

- MS325 issued in September 1993 relating to the export of iron ore through the premises.
- MS570 issued in August 2001 removing noise limits in MS325, instead specifying that conditions to manage noise related to the proposal are regulated by the *Environmental Protection (Port of Esperance Noise Emissions) Approval 2001.*
- MS681 issued in July 2005 for the implementation of upgrades to port facilities and increasing the throughput of iron ore. MS681 was further amended in November 2009 and September 2010 to allow iron exports to increase to the current approved level of 11.5Mtpa.

The Licence Holder has applied under s47A of the EP Act to withdraw the above statements and as such, the Licence Holder has requested changes to licence to support the withdrawal of MS325 and MS681. The delegated officer notes that both MS include a number of conditions and commitments relating to matters (i.e. emissions and discharges) that can be regulated under Part V of the EP Act. The delegated officer's consideration of these matters is outlined in Table 1 below.

The following matters are determined to be outside the scope of regulation under Part V of the EP Act and as such they have not been considered:

- regulation of ship ballast
- dredging activities, including associated environmental monitoring programs such as seagrass and sediment quality
- oil spills associated with vessel operations
- coastal process and littoral drift
- public health and safety, as it relates to traffic management.

Table 1: Conditions and commitments on MS325 and MS681 relevant to emissions and discharges

Condition/ Commitment	Issue	Delegated Officer determination
MS325		
Conditions 2 to 2-1	Proponent Commitments	The conditions require the implementation of a number of commitments made by the Licence Holder as part of the Part IV assessment process. These commitments include measures relating to the management of dust and noise. As discussed further in this table and section 3, the delegated officer considers that management of emissions from the premises are adequately captured by conditions of the licence and or separate approvals relating to noise emissions.
Conditions 3 to 3-5	Iron Ore Dust	Conditions on MS325 pertaining to iron ore dust specify that the Licence Holder: • Ensure the no visible, airborne iron ore dust, nor discolouring from iron ore dust, outside of port operations. • Ensure there is no iron ore particulate discoloration of the

		ocean and beaches resulting from stormwater drainage discharges. • Implement a program to monitor iron ore particles in Esperance beach sand, set threshold for exceedance and implement management action is thresholds are exceeded. • Implement an iron ore dust monitoring program. Iron ore handling is currently regulated through the following conditions of the licence: • General conditions authorising emissions (fugitive dust). • Dust mitigation controls on infrastructure including requirements for Sheds 1 to 4 used to stockpile iron ore to be equipped with dust extraction, enclosure of the iron ore conveyor circuit, inclusion of a foaming system on the iron ore circuit and dust controls on Berth 3 loading chute. • Specifications for iron ore accepted at the premises including requirements to achieve specified moisture content, with monitoring. • Ambient air quality monitoring including continuous monitoring particles as PM_{10} and iron ($\mu g/m^3$) as PM_{10}. The delegated officer considers impacts to human health and amenity from iron ore dust have been adequately considered in previous assessments (DWER 2020c) and that existing conditions of the licence are suitable for regulating these risks. At the request of the Licence Holder, a condition has been included on the licence requiring that no visible dust generated from prescribed activities crosses the boundary of the premises. This condition has been incorporated to support the proposed removal of MS327 and MS681 and provides a clear environmental outcome aligned with the intent of those statements. While this condition sets a boundary-based performance requirement, it is supported by other dust control conditions included in the licence that provide more direct control of emissions at the source, including operational and management controls. The Licence Holder also requested inclusion of an additional condition specifying that iron ore received from the minesite in a dusty condition be diverted to a storage shed for conditioning prior to loading via the shiploader. This condition was determined to be unnecessary, as such onsite management practices form part of the Licence Holder's operational controls and are appropriately managed by the Licence Holder to ensure compliance with the outcome-based condition requiring that no visible dust crosses the premises boundary. It is also noted that the licence requires that product received at the premises is only accepted if it achieves the specified DEM levels to prevent dust generation. As such there is an expectation that appropriate dust controls will be implemented to ensure that DEM levels are maintained at all times while material is being handled at the port. Noting that previous risk assessments have focused on impacts to human health, rather than impacts to amenity from beach discolouration, the risk of iron ore dust impacting beach colour has been considered further in section 3

Conditions 4 to 4-3	Noise Limits	Noise emissions from the premises are regulated under the *Environmental Protection (Port of Esperance Operations Noise Emissions) Approval 2009* (the Approval), which was issued by the Minister for Environment on 25 September 2009 under regulation 17(7) of the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations). The Approval permits noise emissions from the premises to exceed the standard prescribed in the Noise Regulations. The reasons for granting the Approval are detailed in EPA Report 1319. The Approval requires the Licence Holder to take all reasonable measures to minimise noise emissions, acquire noise-sensitive premises where approved noise limits are exceeded, and submit an annual noise report to the department. The Approval excludes grain handling operations and the Esperance Power Station and has a term of 10 years. An application for a further approval was submitted in August 2018, and until a new approval is granted, the Licence Holder must comply with the currently approved noise levels, with no increases permitted due to changes in activity or throughput. The delegated officer considers that noise emissions are adequately regulated through Approval and its requirements for noise management, monitoring and reporting. To avoid regulatory duplication, no further regulatory controls relating to operational noise are required on the licence.
Conditions 5 to 5-1	Shutdown Provision	MS325 includes requirements for iron ore operations to cease if it is apparent that iron ore dust and/or noise limits required by above conditions are exceeded, or are likely to be exceeded. The previous risk assessment for iron ore dust (DWER, 2020c) considered shutdown provisions implemented by the Licence Holder in accordance with the Ministerial Statement conditions as a key control measure when determining the level of risk. While shutdown provisions are not included in the licence, the delegated officer considers that the proposed condition preventing visible dust from crossing the boundary of the premises, in conjunction with existing licence controls, is expected to achieve the same environmental outcome. As discussed above, the risk of iron ore dust impacting beach colour has been considered further in section 3.
Conditions 7 to 7-3	Environmental Management Programme	The premises operates under an Environmental Management Plan (Southern Ports 2023) as required by MS325. As outlined above, environmental risks associated with emissions and discharges from iron ore handling operations have been considered with conditions of the existing licence specifying management measures to mitigate risks. Where appropriate, these are aligned commitments and measures outlined in the Environmental Management Plan. Conditions of the licence relate primarily to the management of dust emissions, noting that noise emissions are managed under the Approval granted under Regulation 17 of the Noise Regulations.
MS681		
Condition 1-1	Implementation	MS681 authorises an annual throughput of iron ore of 11.5Mtpa. The licence currently restricts activities associated with Category 58: Bulking loading of material at the premises to 100,000tpa which

		accounts for all loading and unloading activities associated with the various products handled at the port. Iron ore throughputs will be limited through condition 10 (Schedule 2) aligned with the throughput authorised through MS681. The delegated officer notes that, in addition to specifying the annual iron ore throughput, MS681 also specifies the number of trains and vessels received at the premises for handling iron ore. The delegated officer considers that these requirements are not required to be included on the licence given the daily and annual throughputs applied above.
Condition 2-1	Proponent commitments	Similar to MS325, MS681 requires the Licence Holder to implement commitments relating to the management of dust as follows: • implementation of a dust monitoring and management plan • enclosure of all iron ore conveyors. As outlined above in relation to MS325, the delegated officer considers impacts to human health and amenity from iron ore dust have been adequately considered in previous assessments (DWER 2020c) and that existing conditions of the licence are suitable for regulating these risks. Accordingly, impacts to human health from iron ore dust have not been considered further in this assessment. As discussed above, an additional condition has been applied on request of the Licence Holder preventing visible dust from crossing the boundary of the premises. This condition is aligned with the outcomes of MS681 and intended to support the application with withdraw the statement. The delegated officer notes that commitments are also included on MS681 relating to noise emissions however, as discussed above, noise emissions are considered to be adequately regulated through the *Environmental Protection (Port of Esperance Noise Emissions) Approval 2001* and no further conditions are required on the licence.
Conditions 6-1 to 6-2	Environmental Management System	See condition 7 of MS325 above.
Condition 9-1	Shutdown provisions	See condition 5 of MS325 above.
Conditions 10-1 to 10-3	Decommissioning Plan	Conditions relating to decommissioning are not typically applied to licences granted under Part V of the EP Act. Rather, risks associated with any ongoing emissions and discharges from premises activities post closure are considered via the licence surrender process (section 59A of the EP Act). If these risks are identified as part of the assessment of a surrender application, a Closure Notice under section 68A of the Act can be issued to require the occupier to undertake monitoring or management actions to control those risks associated with closure or decommissioning. Any contamination risks are also managed under the *Contaminated Sites Act 2003*.
Condition 11-1	Performance Review (Dust and	The Licence Holder is required to report annually on compliance performance against conditions of the licence. This reporting includes submission of monitoring data associated with ambient air

	Noise)	quality monitoring and product specifications such as moisture content to demonstrate product moisture levels are being achieved. In addition to annual reporting, the Licence Holder is required to report: • any exceedance of air quality (dust) limits within 24 hours of the exceedance being identified • report any exceedances of the reportable event criteria (relating to dust) within 30 days of the exceedances having occurred. Reporting associated with noise compliance is managed under the Regulation 17 Approval discussed above and therefore is not required to be duplicated on the licence.

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 2020b).

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 2 below. Table 2 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 2: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Dust	Boat maintenance activities	Air / windborne pathway	• Painting is carried out using brushes and rollers only and no spray painting occurs. • Foul removal is completed using brushes, scrapers and wet hoses.
Contaminated wash water management		Discharge to the marine environment.	• The new area is sealed, bunded and contoured to drain towards a 1m^3 sediment trap. • The sediment trap will be manually emptied as needed (e.g. if reaches capacity) and wastewater transferred to the onsite Metals Water Treatment Plant (MTWP). • The sediment trap allows both recovery of particulates (using a geotextile filter under the grated lid) and wash waters to manage contaminated run-off to the marine environment. • The facility will be monitored during boat maintenance activities to ensure no waste material is entering the marine environment. • The facility will be operated in accordance with existing licence conditions requiring the capture of stormwater, cleaning of the boat maintenance area, limiting the amount of paint stored at the facility and disposal of collected solid waste.
Dust	Increases in fertiliser imports through Berth 2 and modified handling method.	Air / windborne pathway	• The fixed crane grab provides more accurate product unloading due to reduced movement from ocean swells (compared to using ship crane equipment). • Grabs will not be overfilled. • Large grab size requires less grab movements reducing potential for spillage. • Grab will be lowered as close to hopper as

Emission	Sources	Potential pathways	Proposed controls
			possible to reduce drop height of product. • Grab will be adjusted to allow for a slow release of product, to minimise drop impact into the hopper, to reduce the likelihood of product spillage or dust. • Sweeper truck readily available if required for berth sweeping. • Visual checks for visible dust are undertaken to determine if dust controls are effective or if additional control is required. • Hopper feeds into a semi-enclosed conveyor system to Shed 5. • Shed 5 is equipped with sealed floor, semi-enclosed walls and a custom truck outloading system. • Spiral chute will be used during unloading into Shed 5 to reduce drop height if visible dust detected. • Shed tonnages are unlikely to exceed 150,000 tonnes. • Cleaning activities within Shed 5 including sweeping to reduce dust generation. • Exit roads from Shed 5 are wet swept with water. • Trucks carrying product are tarped. • Existing of the licence conditions apply relating to ambient air quality monitoring and reporting, enclosure of the sulfur circuit conveyors and complaints management and reporting.
Noise		Air / windborne pathway	• As discussed in Table 1, noise emissions are managed under the *Environmental Protection (Port of Esperance Operations Noise Emissions) Approval 2009*. • Fertiliser handling methods utilise existing equipment at the port.
Product spillage		Direct discharge	• Grab emptied into a larger hopper that is positioned further from the seaward edge of the berth. • Large grab size requires less grab movements reducing potential for spillage. • Fixed crane grab provides more accurate product unloading due to reduced movement from ocean swells (compared to using ship crane equipment). • Grab will be adjusted to allow for a slow release of product, to minimise drop impact into the hopper, to reduce the likelihood of product spillage. Spills are recovered as soon as practical and before rain or at the next hatch change. • Removal of ammonium in stormwater by the
Surface water discharge		Overland runoff	

Emission	Sources	Potential pathways	Proposed controls
			FFT and StormDMT filter system. • Existing conditions of the licence apply relating to stormwater management (including monitoring), use of spill plates during unloading and use of sweeper trucks following unloading activities.
Dust	Spodumene handling (relating to mica levels)	Air / windborne pathway	• Existing conditions on the licence apply relating to the management of dust from handling spodumene such as monitoring and maintaining product moisture levels and ambient air quality monitoring. • The licence includes infrastructure controls for managing dust, including specifying authorised methods of handling and dust management measures (e.g. operation of sprinklers within Shed 5 and operation of dust controls when loading from Berth 3). • The licence specifies requirements for spodumene product accepted at the port to achieve certain characteristics relating to the portion of respirable crystalline silica quartz and percentage of fines contained within the product. • No change to the current methods of handling spodumene are proposed. • Conditions of the licence require the Licence Holder to determine and report spodumene product properties including mica content. • Additional infrastructure controls implemented include operation of a wheel wash with automated sprays at Shed 4 and sealing of the Shed 4 exit road to reduce wheel tracking of product.
Dust	Iron ore exports	Air / windborne pathway	• Existing conditions of the licence apply relating to the management of iron ore dust consistent with commitments made under MS325 and MS681 as outlined in Table 1. • Beach colouration surveys have been undertaken in accordance with requirements of MS325..

3.1.2 Receptors

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

Table 3 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 2020a)).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	**Distance from prescribed activity**
Town of Esperance – local residents	Nearest houses approximately 550m west of Berth 2
Esperance Anglican Community School Our Lady Star of the Sea Catholic Primary School Esperance Primary School	1.1kms west from Berth 2 990mts west from Berth 2 1.2kms north west from Berth 2
Environmental receptors	**Distance from prescribed activity**
Black Cockatoo roosting	Roosting sites 1km buffer – 50mts north west of premise boundary. **Screened out due to distance and no expected impacts.**
Marine environment	Adjacent to port activities to the northeast.
Town beach and Esperance foreshore	Adjacent to port activities to the north. Town Beach (770m) and Esperance foreshore (1.1km).
Esperance Water reserve (P3)	1 km north west of premise boundary. **Screened out due to distance and no expected impacts.**
Esperance Water reserve (P2)	1.5 kms north west of premise boundary **Screened out due to distance and no expected impacts.**

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020b) for each identified emission source 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 applicant 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 applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the amended licence as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

Licence L5099/1974/14 that accompanies this amendment report authorises emissions associated with the operation of the premises i.e. bulk loading activities.

The conditions in the issued licence, as outlined in Table 4 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4: Risk assessment of potential emissions and discharges from the premises during operations.

Risk events					**Risk rating [1]** **C = consequence** **L = likelihood**	**Applicant controls sufficient?**	**Conditions [2] of licence**	**Reasoning**
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Boat building/ maintenance	Dust	Air / windborne pathway causing impacts to amenity	Town Beach, Esperance Foreshore. Marine environment (Esperance Bay) Residents within Town of Esperance	Refer to Section 3.1	C = Minor L = Rare **Low Risk**	Y	Condition 1 – Authorised emissions	The delegated officer notes that no spray painting will occur at the premises (painting is completed using brushes and rollers) and removal of vessel foul is undertaken using brushes, scrapers and wet hoses (Southern Ports 2024). Considering this, and limited anti-fouling and maintenance works undertaken at the facility, the delegated officer considers that the risk of dust (particularly paint overspray) is low and no further licence conditions are required. Emissions associated with any abrasive blasting works are regulated through the *Environment Protection (Abrasive Blasting) Regulations 1998*.
	Contaminated wash water	Direct discharge to the marine environment Impacts on water quality and visibility	Marine environment (Esperance Bay)	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition 1 – Authorised emissions Conditions 30 – 33: Stormwater and industrial wash water management	The delegated officer notes that the new boat maintenance facility is situated within an area that is sealed with infrastructure for capturing waste and stormwater. The delegated officer considers the proposed controls are suitable for managing risks associated with waste and contaminated stormwater. The *Environmental Protection (Unauthorised Discharges) Regulations 2004* also apply to unauthorised discharge of wastes, including sediment and paint, as well as wash water containing these types of material.
Port operations and increased fertiliser imports	Dust	Air / windborne pathway causing impacts to health and amenity	Residents within Town of Esperance.	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition 1 – Authorised emissions Condition 10 – Product restrictions and management Condition 11 – Maintenance and operation requirements Conditions 26-29 – Ambient air quality monitoring Conditions 35-38 – Reporting requirements Conditions 32 – Stormwater monitoring	The delegated officer considers that, although this amendment seeks an increase of assessed fertiliser imports, given the improved loading methods and emission controls detailed in section 3.1, the increase in fertiliser handling does not increase risks associated with dust. The delegated officer notes the existing controls on the licence as well as the applicant's proposed controls, are sufficient to manage the dust. Existing licence conditions will remain for dust monitoring and limit exceedance actions. Conditions have been amended authorising the use of the sulfur circuit and Shed 5 for unloading of fertiliser product. In making these amendments, the delegated officer notes that, due to the high solubility of the product, water sprays cannot be used on fertiliser material and conditions have been amended accordingly to allow for this operational requirement. Applicant controls, such as covering product transported in trucks, have also been conditioned. The delegated officer considers these regulatory controls are sufficient for the mitigation of risks associated with dust from handling increased fertiliser imports.
	Noise	Air / windborne pathway causing impacts to health and amenity	Residents within Town of Esperance.	Refer to Section 3.1	Although increased fertiliser handling is proposed with changes to the method of handling, the delegated officer notes that this is being achieved through operation of existing infrastructure at the premises and therefore no new noise sources are being installed. The delegated officer considers that noise emissions from the premises are adequately regulated under the *Environmental Protection (Port of Esperance Operations Noise Emissions) Approval 2009*. This Approval includes requirement for noise monitoring and reporting to verify that specified noise limits are being achieved.			
	Spillage	Direct discharge to marine environment impacting water quality and ecosystem health	Marine waters adjacent to the premises.	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition 1 – Authorised emissions Condition 10 – Product restrictions and management Condition 11 – Maintenance and operation requirements	The delegated officer notes that the proposed method of handling fertiliser is expected to reduce potential spillage and therefore is not expected to increase the risk of spills impacting the marine environment. Existing controls on the licence relating to management of spillage, such as use of spill plates and wet sweepers following loading, apply. The delegated officer also notes that the existing stormwater drainage and treatment system has provided improved stormwater management at Berth 2. On this basis, the delegated officer considers that existing emission controls are sufficient for managing spill risks.
	Stormwater contaminated with product	Overland runoff to marine environment impacting water quality and ecosystem health		Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y		As indicated above, the delegated officer notes that stormwater monitoring data provided in the trial report, including monthly stormwater sampling results, indicates a reduction in peak concentrations of ammonia and total nitrogen in Sump 4 (H4) following commissioning of the upgraded stormwater system in September 2023. This trend indicates that the existing stormwater management system and associated controls are capable of adequately managing the increased fertiliser handling volumes.
Materials handling (spodumene)	Dust (mica)	Air / windborne pathway causing impacts to health	Town of Esperance	Refer to Section 3.1	C = Moderate L = Unlikely	Y	Condition 1 – Authorised emissions Condition 10 – Product	The delegated officer has determined that the removal of the specified mica limit from the licence is acceptable and does not alter the previously assessed risk associated with dust emissions from spodumene handling. This decision is informed by advice from the DoH, which raised no objection to the removal of the mica criterion, noting there is no evidence that mica poses a greater risk to human health than normal rock

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of licence	Reasoning
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
		and amenity			**Medium Risk**		restrictions and management Condition 11 – Maintenance and operation requirements Condition 18-21 – Spodumene acceptance and specifications including mica sampling.	dust, except where high and prolonged exposures occur in certain occupational settings—circumstances not considered relevant to general public exposure. The assessment also notes that spodumene has a low proportion of respirable particles smaller than 10µm (reported as 0.88%), well below the existing licence requirement limiting respirable material handled at Berth 3 to less than 3%. Further, the licence contains comprehensive dust management controls, including ambient air quality monitoring, prescribed infrastructure and handling methods, and the implementation of specific dust controls such as sprinkler systems when handling spodumene in Shed 5 and during loading at Berth 3. The Licence Holder is also required to maintain and monitor product Dust Extinction Moisture (DEM) levels to minimise dust generation. This is considered to be a critical control for mitigating dust emissions from the premises and limits are set to ensure the product accepted at the port meets these moisture requirements. To ensure the risk profile remains unchanged, the delegated officer has determined to retain licence conditions requiring ongoing sampling of spodumene to monitor muscovite content, thereby providing continued oversight of mica concentrations.
Iron ore handling	Dust	Air / windborne pathway causing impacts to amenity (beach discolouration)	Town Beach, Esperance Foreshore.	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 1 – Authorised emissions Condition 10 – Product restrictions and management Condition 11 – Maintenance and operation requirements Condition 22 - 25 – Iron ore acceptance and monitoring including DEM specifications. Conditions 26-29 – Ambient air quality monitoring	Per the requirements of MS325, the Licence Holder has undertaken surveys of the beach sand to determine whether iron ore handling operations are impacting Esperance beaches. Through MS325, the Licence Holder has developed a series of thresholds/triggers to determine whether impact is occurring. Results of monitoring undertaken in 2020 and 2021 (Southern Ports 2023a) confirmed that trigger values had not been exceeded. Previous survey results also indicated that iron ore emissions are not impacting beach sand colour. This is further supported by the lack of complaints received in relation to iron ore dust and beach discolouration. The delegated officer notes that dust emissions are currently regulated through conditions of the licence as described in Table 1 and considers these controls to be suitable for the ongoing management of iron ore dust. The delegated officer considers the conditions on the licence relating to the management of iron ore dust, including the new condition restricting visible dust from crossing the boundary of the premises (refer to Table 1), are sufficient to manage the risk relating to beach discolouration. On this basis ongoing beach colour monitoring is not considered necessary. This requirement may be reviewed at a later date in response to complaints or other evidence indicating that the risk profile has changed.

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

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Local Government Authority (Shire of Esperance) advised of proposal on 23 January 2026.	No response received.	N/A
Department of Health (DoH) request for advice was sent 23 January 2026.	DoH replied on 16 February 2026 providing advice on removal of muscovite conditions on the licence. See section 2.2.4.	The delegated officer's consideration of DoH advice is outlined in Table 4.
Applicant was provided with draft documents on 10 April 2026.	The applicant provided a response on 21 and 28 April 2026. Refer to Appendix 1. The applicant was provided with a revised draft on 29 April 2026 and responded on 30 April 2026. No further comments were made.	

5. Conclusion

Based on the assessment detailed above, the delegated officer has determined that the application to amend the licence (L5099/1974/14) will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements. As a result of this decision, the delegated officer has made amendments to this licence as detailed below:

- The premises boundary has been adjusted to support relocation of the boat maintenance area as well as the removal of the Hughes Road entrance roundabout.
- Conditions associated with Hume Interceptors and the stormDMT have been amended to account for new stormwater infrastructure installed in 2023. This includes amending the requirement to empty the Hume interceptors 2 and 4. Conditioning around monitoring will remain to monitor discharge to the marine environment.
- Conditions have been updated to allow the increased throughput of fertiliser and altered method of handling noting that these changes are not expected to significantly alter the risk profile of fertiliser handling.
- The 5% muscovite criteria applied to acceptance of spodumene has been removed from the licence. Conditions to monitor the percentage of mica levels have been maintained to ensure risks associated with muscovite remains at sufficiently low. This determination is based on advice from DoH, considerations for the low amount of respirable dust in spodumene product and noting existing controls exist on the licence for managing dust emissions.
- A new condition has been included on the licence requiring that no visible dust from prescribed activities crosses the boundary of the premises. This condition is applied on request of the Licence Holder to support the withdrawal of MS325 and MS681 as discussed in Table 1. Iron ore throughputs have also been specified consistent with existing operations and the approved throughput authorised under MS681.

Other minor amendments have been made to the licence upon request of the Licence Holder as detailed below:

- Terminology around “respirable silica” has been updated to “respirable crystalline silica” for clarity and technical correctness.
- An allowance has been included for external laboratory analysis of product samples noting that the licence currently only stipulates onsite laboratory testing. Clearly documented methodology must continue to be used per the requirements of the licence.

In amending the licence, the delegated officer has also made administrative amendments including revising licence condition’s numbers for numerical consistency, correcting clerical mistakes or errors, and make other administrative changes that do not alter the obligations of the licence.

5.1 Summary of amendments

Table 6 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 6: Summary of licence amendments

Condition number	Proposed amendments
Condition 6, item (b)	Updated terminology of “*crystalline*” after “*respirable*”.
Condition 15 (previously 14), Table 2	
Condition 12	New condition added requiring that no visible dust generated by activities on the premises crosses the boundary of the premises (refer to Table 1)
Condition 19 (previously 18), item (b)	removal of muscovite condition (item (b) and condition numbers updated accordingly.
Condition 19 (previously 18), new item (b)	Updated terminology of “*crystalline*” after “*respirable*”.
Condition 19 (previously 18), Table 3	Allowance for external laboratory analysis and updated terminology of “*crystalline*” after “*respirable*”.
Condition 27 (previously 26) 26, Table 5	Removal of “*and midday to midday*”. This is not required as reporting of dust levels as 24-hour averages from midnight to midnight is considered standard practice.
Condition 30 (previously) 29, item (b)	Remove requirement for sediment and water removal at Hume Interceptors 2 and 4.
Condition 31 (previously 30), item (a)	Removal of Hume Interceptors from this requirement and condition numbers updated accordingly.
Condition 35 (previously 34)	Remove reference to “works conducted in accordance with condition 8 of this Licence” as these conditions are no longer included in the licence. Reference to condition 20 is included (previously omitted in error)
Condition 37 (previously	Removal requirement to provide logbook records relating to Hume Interceptors and replace with requirement to provide records of

36), item (g)	maintenance on the StormDMT and First Flush Tank.
Definitions, Table 8	Inclusion of definitions for "*First Flush Tank*", "*Storm (Dissolved Metals Treatment)*" and "*tpa*".
Figure 1	Update Figure 1 to align with amended premises boundary.
Schedule 2, Table 9	Item 8: Include reference to fertiliser for products associated with Shed 5 Item 25: Adjust description of the boat maintenance facility.
Schedule 2, Table 10	Item 2: • Increase assessed annual commodity amount for fertiliser from 500,000tpa to 800,000tpa. • Include allowance for fertiliser to be unloading via the existing sulfur circuit into Shed 5. Item 5: • Insert annual throughput limit for iron ore (11,500,000tpa) Item 6: • Adjust units for annual throughputs from tonnes per year to tpa.
Schedule 2, Table 11	Item 9: Sulfur hopper • Include provision for the operation of sprays to be excluded when handling fertiliser product. Item 11: Storage Sheds 4 to 6 • Include provision for storage of fertiliser within Shed 5. • Include requirement for trucks carrying fertiliser product to be covered. Item 16: Boat maintenance infrastructure • Remove condition relating to use of tarpaulins as is it not relevant to operation of new boat maintenance facility. • Update condition relating to removal of solid waste to align with stormwater system at new location. • Update condition relating to the disposal/treatment of captured stormwater/wash water.
Schedule 5: Premises boundary	Add Schedule 5 to ensure clear delineation of prescribed premises boundary.

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Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response
6, 14 and 18	As requested through the drafted documents, the Licence Holder provided advice confirming that changes to the terminology regarding "respirable crystalline silica" is aimed at providing clarity, consistency and technical correctness (i.e. excludes inclusion of amorphous silica).	Noted.
34 and Table 8	The Licence Holder has requested beach discolouration study should be removed as a requirement. The original recommendation to conduct the survey every five years stemmed solely from compliance with Ministerial Statement 325. More recent discussions with DWER Part V and Part IV teams in September last year confirmed the study is unnecessary due to existing iron ore loading controls. The draft Amendment Report also notes that current licence conditions—such as air quality monitoring, infrastructure controls (e.g. spray systems), and moisture content limits and monitoring—are sufficient to manage risks associated with iron dust emissions.	The delegated officer has considered the licence conditions and other controls in place and agreed to remove the drafted condition from the licence. It is noted that the condition was applied to align with applicant controls however noting advice from the applicant, this is no longer relevant. As stated by the applicant, and in Table 4 above, the delegated officer considers that licence conditions are appropriate for managing dust risks associated with beach colouration.
Schedule 1, (Figure 1) & Schedule 2	Figure 1 was updated and GPS points provided as a response.	Prescribed Premises boundary Figure 1 updated and GPS coordinates in Table 13 were added to the licence.
Table 11	Additional information on dust management was provided by the Licence Holder to support increased fertiliser trade in response to the drafted documents as detailed below: (i) Use of a stainless steel helical slide to transfer fertiliser from the Shed 5 apex to the shed floor. (ii) Clean-up of loading activities in Shed 5 include sweeping sealed floor around stockpiles to reduce dust being mobilised. (iii) Exit roads from Shed 5 are wet swept with water that is that is transported and disposed in accordance to relevant state waste legislation.	The delegated officer considered the additional information provided by the Licence Holder and added the additional information as necessary to Table 2 of this decision document under applicant controls.
Schedule 3, Table 12, Item 16	The Licence Holder provided clarification about storm/wash water management relating to the new boat maintenance area. The Licence Holder requested to delete: "all wash-water must be captured and directed to a tank for incorporation into the MWTP" and replace with: "During works, if the stormwater pit becomes full, a cleaning contractor will empty it and transfer the water to the Waste Water Treatment Plant (WWTP)".	The delegated officer has reviewed the information and agreed to amend the item to reflect the requirement to empty the stormwater pit and transfer it to the MWTP.