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	L6744/1996/12
Licence Holder	Southern Ports Authority
File Number	INS-0001336 (APP-0032102)
Premises	Southern Ports Authority - Port of Bunbury Legal description – Lot 963 on Deposited Plan 220558 and Lot 962 on Deposited Plan 219848 Inner Harbour - Berth 5 BUNBURY WA 6230 As defined by the maps in Schedule 1 of the revised licence
Date of Report	29 January 2026
Decision	Revised licence granted

Fiona Roser
Digitally signed by Fiona Roser
Date: 2026.01.29 14:52:38 +08'00'

Fiona Roser
A/Manager, Heavy Industries
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Licence L6744/1996/12 is held by Southern Ports Authority (licence holder) for the Port of Bunbury - Inner Harbour (the premises), located in Bunbury, Western Australia.

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 L6744/1996/12 has been granted.

The revised licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

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) 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 2025, the licence holder submitted an application to the department to amend licence L6744/1996/12 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The amendment to the licence is to operate ongoing shipments of washed silica sand from Berth 5 at the Port of Bunbury.

The existing licence currently authorises the licence holder to undertake Category 58 and 58A activities (bulk material loading or unloading) at the premises up to 75 000 tonnes per day. There is no proposed change to the throughput of the prescribed premises categories by the licence holder. This amendment is limited only to Category 58 activities.

Additionally, the department has initiated administrative amendments to update the licence format. Further details of these amendments can be located in Table 8.

2.3 Background and operations

Licence L6744/1996/12 regulates the loading/unloading activities of two berths and storage of material at Berths 5 and 8 in the Inner Harbour at the Port of Bunbury (as depicted in Figure 1).

Berth 5

Berth 5 infrastructure consists of a mobile shiploading system (mobile crane, shiploader, telescopic conveyor, truck unloader, grab buckets and a rotating container system). Iron concentrate and spodumene is loaded and exported at Berth 5 using rotating containers. Mineral sands exported from Berth 5 can be loaded using the rotating container system or the mobile shiploading infrastructure. Coal, heavy mineral concentrate (HMC), ilmenite, medium zircon feedstock (MZF), petroleum coke and fertiliser are imported and unloaded at Berth 5 using grab buckets. Berth 5 operates a hopper for the loading of trucks for material removal offsite or transport to onsite storage sheds.

Berth 8

Berth 8 materials are loaded via road hopper or storage shed to telescopic or cascade chute system. The conveyor system is closed and the shiploading infrastructure is connected to dust collectors. Materials exported from Berth 8 are copper concentrate, ilmenite, leucoxene, rutile, silica sands, alumina hydrate and spodumene. Seven sheds are located at Berth 8 for the use of onsite material storage.

Licence L6744/1996/12 includes trial loading and/or unloading, allowing for the handling of bulk granular materials not assessed under the licence subject to conditions. Trials do not extend beyond 12 months and shipments of the trial material beyond this time are required to be assessed and added to the licence through a licence amendment application.

2.3.1 Trial notification

On 7 November 2024, the department received a notification from the licence holder of the intent to commence trial bulk loading of washed silica sand from Berth 5 at the Port of Bunbury. On 25 November 2024, the department acknowledged the trial notification after conducting a risk assessment and determining the appropriate handling method of the material aligns with Handling Method 2 in accordance with the *Guideline: Port Authority bulk handling trials* (DWER 2018). Although the material risk only requires a minimum handling strategy of Handling Method 2, the licence holder proposed to use the Handling Method 4 loading strategy, which includes emptying containers into the vessel hold using rotating tipping frames, as an additional risk control.

The first trial loading commenced on 3 January 2025. Six shipments with a total trial loading of 291,301 tonnes of washed silica sand were completed over 10 months, with the final trial loading of the material concluding on 20 September 2025. To continue the ongoing loading of bulk silica sand following 3 January 2026 (trial expiry date), the licence holder has submitted this licence amendment application.

2.3.2 Washed silica sand (the material)

The material proposed for loading, currently being trialed through Berth 5, is washed silica sand (crystalline silica) manufactured and transported by Heidelberg Materials Australia Pty Ltd (the manufacturer).

In accordance with *Guideline: Port Authority bulk handling trials* (DWER 2018), crystalline silica sand is classified as an unmodified raw material type. The risk of silica dust can be determined through the analysis of particle size distribution and moisture content (DWER 2018).

Particle size distribution

The department considers respirable crystalline silica to be the fraction of crystalline silica dust that is 10 µm (micron) in diameter or smaller (PM_{10}), as advised by the Department of Health (DWER 2018). As displayed in Table 1, the entirety of the material sample was retained in sieves larger than 150 µm. Therefore, 150 µm is considered the lower limit of the particle size for this material, and it does not fall within the respirable dust size range that would trigger silica dust risks.

Table 1: Grain fineness number (AFS) of material. (*Source: Heidelberg Materials 2025*)

Mesh sieve size*	Test sieve size (µm)	Average % retained	% retained range
20	850	1	0 - 5
25	710	5	0 - 10
30	600	17	10 - 25
40	425	46	30 - 55
50	300	29	20 - 40
70	212	2	0 -10
100	150	0	0 - 0
140	106	0	0 - 0
200	75	0	0 - 0
270	53	0	0 - 0

* Number of openings per linear inch in the sieve screen

Chemical composition

It was identified that no asbestos was detected in the silica sand and there were low concentrations of leachable metals detected (Table 2). The chemical composition of the washed silica sand is summarised in Table 2.

Table 2: Chemical composition of material. (*Source: Heidelberg Materials 2025*)

Property characteristic	Property average (%)	Property Range (%)
Silicon dioxide (silica, amorphous) (SiO_2)	99.86	99.70 – 99.90
Aluminum oxide (Al_2O_3)	0.017	0.015 – 0.030
Calcium oxide (CaO)	0.004	0.003 – 0.005
Chromium (III) oxide (Cr_2O_3)	<0.0015	<0.0015 - <0.002
Iron (III) oxide (Fe_2O_3)	0.007	0.005 – 0.015
Potassium oxide (K_2O)	0.002	0.002 – 0.005
Magnesium oxide (MgO)	<0.0017	<0.0017 - <0.002
Manganese (II) oxide (MnO)	<0.0013	<0.0013 - <0.001
Sodium oxide (Na_2O)	0.005	0.003 – 0.20
Titanium oxide (TiO_2)	0.025	0.020 – 0.035
Loss on ignition (LOI)	0.094	0.059 – 0.170

Moisture content

The material was tested using Australian Standard (AS) 4156.6-2000 to determine the effects of moisture content on dust generation in 2017. It was determined that the material had a dust extinction moisture (DEM) of 0.2%, and no measurable dust above this moisture (J&J 2017). Dust generation below 0.2% was not viable and unable to be measured during the testing, hence a moisture of 0.2% is considered the lower limit for the DEM value of the material. The material moisture content is to be conditioned to meet or exceed a DEM of 0.2% and will be provided to

the licence holder by the manufacturer above this level prior to shipment loading to mitigate dust generation.

The department's risk assessment of the trial shipment of silica sand revealed the following:

- The material does not contain elevated respirable silica;
- The material has low concentrations of leachable metals presenting a low risk to the marine environment; and
- The material has a DEM value between 0.2% and 2.9% presenting a low dust risk.

The conclusions revealed from the trial shipment risk assessment align with the material in this amendment confirming the risk of the material has not changed.

Trial reporting and dust monitoring data

Trial loading reports were required to be submitted to the department in accordance with condition 25 of licence L6744/1996/12. Reports submitted confirmed the material met or exceeded the specified DEM level before loading, and provided the tonnage shipped during each loading period. Details of the loading periods can be viewed in Table 3.

Table 3: Trial loading details of each silica sand shipment from Berth 5.

Shipment	Loading period	Average moisture content (%)*	Tonnage (MT)
1	03/01/2025 – 11/01/2025	1.6	53 304
2	15/02/2025 – 21/02/2025	3.95	52 811
3	17/03/2025 – 23/03/2025	4.18	53 480
4	15/04/2025 – 22/04/2025	5.6	49 881
5	27/05/2025 – 01/06/2025	2.37	30 000
6	14/09/2025 – 20/09/2025	1.6	51 825
		Total tonnage (MT)	291 301

* Moisture content was determined using the Australian standard AS 1289.2.1.1 method.

Ambient air quality monitoring for dust (as PM_{10} and TSP) was carried out during the trial period in accordance with condition 4 of the licence to determine dust emissions from the port operations. Results of monitoring were submitted to the department at various intervals during the trial period per the licence conditions.

According to the *National Environment Protection (Ambient Air Quality) Measure (*DCCEEW 2021), the maximum pollutant concentration standard over a 24-hour period for particles as PM_{10} is 50 µg/m^3. The first trial loading report, covering the period from January to March 2025, confirmed two exceedances of PM_{10} were recorded, on 16 and 17 February 2025, during a loading of silica sand at Berth 5; the licence holder attributed these exceedances to a bush fire smoke event and claimed them not to be port related. Exceedances were also recorded at the department's air quality monitoring site (AQMS) for Bunbury, confirming it was likely related to an external regional event. The port ambient air quality monitoring stations did not record any further 24-hour average PM_{10} readings that exceeded 50 µg/m^3 during remaining loading and shipment of silica sand that occurred during the April to September 2025 period.

The licence holder measured the total suspended particulates (TSP) in accordance with the licence conditions and compared these against the ambient air quality standards and ambient air quality limits stated in Schedule 2 of the *Environmental Protection (Kwinana) (Atmospheric Wastes) Regulations 1992 (*EPA 1992*).* The TSP monitoring data did not exceed the standard of 90 µg/m^3 over a 24-hour period during any silica sand loading events.

2.3.3 Operations

Operations will continue as assessed under the trial notification. The proposed yearly volume of the material is between 300,000 to 450,000 tonnes. The licence holder expects each shipment size to be approximately 50,000 tonnes and estimates between 6 and 9 vessels to ship washed silica sands per annum. The material will be transported by truck in lidded rota-boxes to Berth 5. The material will be stored on site within lidded rota-boxes (as specified in Figure 1) and transported to Berth 5 to load onto the vessel. The material will be lifted into the hold of the vessel via existing mobile harbour cranes (MHC) and discharged into the hold using a sealed rotator tipping frame (RTF). This method of handling aligns with the Minimum Handling Method 4 from *Guideline: Port Authority bulk handling trials* (DWER 2018). Spill trays will be installed between the berth and vessel to capture any spillage of the material during loading.

During operations, the licence holder will be required to continue ambient air quality monitoring in accordance with existing conditions on licence L6744/1996/12.

Figure 1: Port of Bunbury – Inner Harbour site layout

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 4 below. Table 4 also details the control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

Table 4: Licence holder controls

Emission	Sources	Potential pathways	Proposed controls
Silica dust	Loading and handling material, use of the rotator tipping frame (RTF)	Air/windborne pathway	- The RTF lid overhangs the walls of the container naturally preventing water or contaminants ingress; - CCTV monitoring to ensure the operations at Berth 5 are conducted to eliminate spillage/dust. - If visible dust is observed escaping the ships hold, discharge height from the RFT and loading rate will be reconsidered; - Low concentrations of leachable metals in the material; - Material is received and stored in lidded containers that are not removed unless within the ships hold; - Using a minimum handling method 4 to minimise spillage; and - Material moisture levels provided before any loading to confirm the DEM is met. <u>Existing conditions in L6744;</u> - Condition 1 (Table 1): infrastructure and equipment requirements (Items 2, 3 and 4); - Condition 3: Material acceptance based on moisture content; and - Condition 4: Monitoring of ambient air quality of PM_{10} and TSP parameters.
Noise	Mobilisation of loading infrastructure,	Air/windborne pathway	- In the event that noise complaints are received, an investigation and remedial action will be triggered. Including potential

Emission	Sources	Potential pathways	Proposed controls
	vehicle movements		shutdown of operations.
Contaminated stormwater	Spillage from loading and handling of material	Runoff	- The material has low concentrations of leachable metals; - The material will be stored in lidded rota-boxes which prevent water ingress; and - Use of mobile road sweepers and vacuum trucks to remove spilt material from hardstand surfaces and sumps. <u>Existing conditions in L6744;</u> - Condition 1 (Table 1): infrastructure and equipment requirements (Item 4 (a)).

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020b), 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 5 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 5: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Residential premises	Nearest residential premises is 395 m south from Berth 5
Environmental receptors	**Distance from prescribed activity**
Remnant vegetation	Remnant vegetation outside premises boundary, approximately 790 m southeast from Berth 5
Marine environment and fauna in the inner harbour	Underlying Berth 5
Preston River	890 m east from Berth 5
Threatened Ecological Communities (TECs)	Multiple TECs with in a 2km radius of the premises, with the closest TEC located approximately 400 m from Berth 5 activities

3.2 Risk ratings

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

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

Additional regulatory controls may be imposed where the licence holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 6.

The revised licence L6744/1996/12 that accompanies this amendment report authorises emissions associated with the operation of the premises i.e. Category 58 and 58A (bulk material loading or unloading)

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

Table 6. 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/ DWER comments
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence holder's controls**				
Operation								
Mobilisation of loading infrastructure, vehicle movements	Noise	Air/wind dispersion causing impact to amenity of nearby residents.	Nearest residential receptor 395 m from Berth 5	Refer to Section 3.1	C = Minor L = Rare **Low risk**	N/A	N/A	The delegated officer considered the risk of noise impact from port operations is unlikely to change as a result of this activity. As such, additional controls are not required. The Environmental Protection (Noise) Regulations 1997 (EP Noise Regulations) apply to noise emissions from port activities.
Loading, handling and spillage of material, use of the rotator tipping frame (RTF)	Silica dust	Air/wind dispersion causing possible health decline of vegetation and nearby water resources.	Remnant vegetation 790 m from Berth 5 Preston River 890 m east TEC ~400 m from Berth 5	Refer to Section 3.1	C = Minor L = Rare **Low risk**	Y	Condition 1 (Table 1): Infrastructure and equipment requirements (Items 2, 3 and 4) **Condition 3: Material acceptance based on moisture content** Condition 4: Ambient air quality monitoring **Condition 8: Reporting conditions**	The delegated officer is satisfied with the proposed controls in addition to the existing controls on the licence to mitigate the risk of dust and considered it necessary to include washed silica sand in existing conditions 3 and 8 to verify moisture content levels.
	Contaminated stormwater	Direct discharge to water potentially causing impact to health of aquatic environment.	Preston River 890 m east Marine environment underlying the Berth	Refer to Section 3.1	C = Slight L = Unlikely **Low risk**	Y	Condition 1 (Table 1): Infrastructure and equipment requirements (Items 2, 3 and 4)	The delegated officer is satisfied with the proposed controls in addition to the existing controls on the licence to mitigate the risk to an acceptable level.

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

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 7 provides a summary of the consultation undertaken by the department.

Table 7: Consultation

Consultation method	Comments received	Department response
The application advertised on the department's website on 9 December 2025.	One public submission received 20 December 2025. See Appendix 2 for comments.	See Appendix 2 for response.
Local Government Authority (City of Bunbury) advised of proposal on 9 December 2025.	The City of Bunbury provided the following comments on 22 December 2025; 1. Requested the impact of haulage operations within the City of Bunbury be reviewed to minimise the number of trucks entering the facility and asked to be provided with details of the number of trucks entering and exiting in relation to port activities. 2. Requested to further understand the environmental impacts of the washing silica sand aspects of the operations regarding spillage into waterways and impacts to all marine life. 3. Requested an invitation for the City's Climate Action and Sustainability Working Group (CASWG) to view the port operations to ensure full community consultation has been carried out in accordance with the City's Sustainability Policy.	1. The department notes the City's comments appear to relate to haulage associated with all port activities. As per Section 2.2, the scope of this application and the department's assessment is limited to the shipment of washed silica sands only, with expected throughput being 300,000 to 450,000 tpa and approximately 6 to 9 shipments per annum, being only a proportion (<5%) of port activity which is approximately 17 million tpa and >400 ship visits (https://www.southernports.com.au/bunbury/trade-data). Additionally, traffic and its related impacts which occur outside the premises boundary are not within the scope of assessments under Part V of the EP Act and are generally a matter considered by a local government in development approval processes under the *Planning and Development Act 2005.* With respect to the City's comments relating to broader port activities outside the scope of this assessment, the department notes the licence holder may seek to further consult with the City regarding broader premises activities. 2. There will be no washing activities undertaken at the premises. The silica sand received at Berth 5 will be washed prior and the only activities occurring within the premises are receival, temporary storage and loading of the material. The department reviewed the characteristics of the material (Section 2.3.2) and determined there is no elevated risk of environmental impact based on the characteristics of the product. The risk of environmental impacts associated with the handling and loading of materials was assessed by the department

Consultation method	Comments received	Department response
		(Section 3, Table 6) and controls have been applied in the licence to mitigate the risk of impacts to the marine environment. 3. The department notes the City's request appears to relate to the broader port activities occurring on the premises. The department conducted consultation on the application in accordance with Guideline: Industry Regulation Guide to Licensing.and advertised the application on 9 December 2025 for public comment. With respect to the City's comments, the department notes the licence holder may seek to further consult with the City regarding broader premises activities.
Licence holder was provided with the draft amendment on 23 December 2025.	*Comments from the licence holder were received on 12 January 2026. See Appendix 1 for comments*	See Appendix 1 for response.

5. Conclusion

Based on the information in the application and this assessment, the delegated officer has determined the proposal to continue ongoing shipments of washed silica sands from Berth 5 will not pose an unacceptable risk of impacts to public health or the environment and does not alter the risk profile of the premises.

In determining to amend the licence, the following matters were considered by the delegated officer:

- Particle size distribution and moisture content of the material confirmed there was a low risk of respirable silica dust as an emission;
- Controls proposed by the applicant for the loading/unloading activities, combined with existing controls on the licence were deemed to suitably mitigate the risk of emission impacts; and
- There were no noticeable changes to monitoring results or any complaints received during the trial loading of the material.

The delegated officer considered it necessary to include the material in the existing licence conditions 3 and 9 to verify moisture content levels are met prior to loading to mitigate the risk of silica dust emissions.

The delegated officer has therefore determined that a revised licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

Licence updates

As part of the amendment the delegated officer has taken the opportunity to update the format of the licence to align with the department's current template. In updating the licence, the delegated officer has:

- included reporting and record keeping conditions consistent with the current department licensing format,
- restructured the layout of the licence;
- corrected clerical mistakes; and
- reformatted bulleting, spacing, fonts, and tables.

The obligations of the licence holder have not changed in updating the licence therefore no additional risk assessment relating to previously assessed activities has been undertaken. The full details of the amendments to the licence are included in Table 8.

5.1 Summary of amendments

Table 8 provides a summary of the proposed amendments and update of licence conditions to the current licence format 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 8: Summary of licence amendments and consolidation of licence conditions.

Existing condition	Condition summary	Revised licence condition	Conversion notes/amendment
N/A	Cover page	N/A	EO instrument file number added. Date of amendment updated.

Existing condition	Condition summary	Revised licence condition	Conversion notes/amendment
N/A	Licence applicability	Schedule 2 (Table 4): Bulk materials loaded and unloaded	Material loaded/unloaded at the premises transferred into Schedule 2- Table 4 and updated to provide clarity of previously assessed activities.
N/A	Amendment – June 2019	N/A	Removed. Included in the licence history table.
N/A	Licence history	N/A	Licence history table revised to current licensing format and this licence amendment added.
N/A	N/A	Interpretations	Interpretations added to align with the current licensing format
N/A	Definitions	Table 3: Definitions	Revised to current licensing format Revised definitions for 'AACR', 'annual period', 'CEO', 'DWER' and 'licence holder'. Removed definitions for 'assigned level', 'ANZECC', 'EIP', 'mAHD', 'mtpa', 'Noise Regulations', 'PA' and 'ug/L'. Added definitions for 'AS 1289.2.1.1', 'AS 3580', 'discharge', 'emission', 'EP Act', 'washed silica sand', 'licence', 'premises', prescribed premises', 'TEOM', 'tpa' and 'waste'.
Schedule 1: Maps	Premises map	Figure 1: Map of the boundary of the prescribed premises Figure 2: Spodumene concrete storage shed location	Added Figure 1 with required map characteristics in current licensing format. Added a Figure 2 caption.
Schedule 2: Ambient air quality monitoring locations	N/A	Figure 3: site layout and dust monitoring locations.	Converted Schedule 2 to Figure 3 with updated map.
Licence conditions			
Condition 1 to 5	General conditions	Table 1: infrastructure and equipment requirements	Conditions consolidated into Table 1.
Condition 6	AACR reporting	Condition 9	Wording revised to current licencing format.
Condition 7 to 13	Mobile shiploading infrastructure conditions	Table 1: infrastructure and equipment requirements	Conditions consolidated into Table 1: Infrastructure and equipment requirements

Existing condition	Condition summary	Revised licence condition	Conversion notes/amendment
Condition 14	Ambient air quality monitoring	Condition 4	Revised to current licencing format.
N/A	N/A	Condition 6, 7 and 8	Standard record conditions added to align with the current licencing format.
Condition 15	Monitoring data	Condition 8	Revised with updated condition numbering. Added moisture content data to verify compliance with condition 3.
Condition 16 and 17	Ambient air quality monitoring	Table 1: infrastructure and equipment requirements	Conditions consolidated into Table 1: infrastructure and equipment requirements,
Condition 18	Moisture content	Condition 3	Added washed silica sand to the condition.
Condition 19 and 20 Table 3	Spodumene storage infrastructure and equipment	Condition 1 and 2 Table 1: infrastructure and equipment requirements	Wording revised to current licencing format. Table 3 revised to include mobile shiploading infrastructure and truck unloader, conveyors and baghouse dust collector requirements (existing conditions moved). Conditions for Berth 5 open handling infrastructure added.
Conditions 21 to 26	Trial conditions	Conditions 10 to 15	New numbering

References

1. Department of Climate Change, Energy, the Environment and Water (DCCEEW) 2021, *National Environment Protection (Ambient Air Quality) Measure*, Federal Register of Legislation.
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2018, *Guideline: Port Authority bulk handling trials*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER) 2020a, *Guideline: Environmental Siting*, Perth, Western Australia.
5. Department of Water and Environmental Regulation (DWER) 2020b, *Guideline: Risk Assessments*, Perth, Western Australia.
6. Heidelberg Materials Australia Pty Ltd (Heidelberg Materials) 2025, *Technical data sheet: AFS 30-35 washed silica sand*, Rivervale, Western Australia.
7. Jenike and Johanson Pty Ltd (J&J) 2017, *Dust extinction moisture testing of silica sands*, Rivervale, Western Australia.
8. Southern Ports Authority 2025, *Amendment application for L6744/1996/12 submitted on 29 October 2025*, Bunbury, Western Australia.

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

Condition	Summary of licence holder's comment	Department's response
Draft licence		
Table 3: Definitions	Licence holder has requested to remove 'Heidelberg Materials Pty Ltd' from the 'washed silica sand' definition.	Noted and accepted. Definition / condition has been updated.
Schedule 2, Table 4: Bulk materials imported/exported at Berth 5 and 8.	The licence holder confirmed materials shipped through Berth 5 and 8 and each throughput of material. The licence holder notes the throughput for each product are estimated only, including a 20% contingency, and request they are not used as licence maximum limits.	Noted, the information has been culminated into Schedule 2, Table 4 of the licence. It is noted the product throughput estimated are not used as licence maximum limits and the limit for Category 58 and 58A remains at 75,000 tonnes per annual period.
Schedule 1, Figure 1	The licence holder provided an updated map of the premises boundary.	Figure 1 has been accepted and updated.
Schedule 1, Figure 3	The licence holder provided an updated map of the site layout and dust monitoring locations.	Figure 3 has been accepted and updated.
Draft amendment report		
Section 2.3	The licence holder was to confirm the operations and bulk materials at each Berth in Section 2.3. The licence holder confirmed the materials shipped through Berth 5 and 8 in Schedule 2, Table 4 of the licence.	Information provided on bulk materials imported/exported from Berth 5 and 8 has been added and updated in Section 2.3.
Table 4: Licence holder controls	The licence holder was to confirm how the RTFs would be sealed. The licence holder confirmed the RTFs will not be sealed but containers will be sealed with lids. The licence holder confirmed noise complaints will be investigated via data from a noise monitor, that is operated by the stevedores.	Noted. No change to risk assessment.
Section 2.3.3: Operations	The licence holder confirmed the material will be stored within lidded rota-boxes when stored on the premises.	Noted. No change to risk assessment.

Appendix 2: Summary of public comments

Summary of public comments	Department's response
Comments were received on the 20 December 2025. Key concerns raised in the submission included; 1. There is no raw data provided in the application to verify the licence holder's claims that there was no dust observed or noise complaints despite the licence holder operating a comprehensive dust monitoring network. Raw dust, noise and water quality sampling results for the trial periods should be provided. 2. A baseline water quality profile including heavy metal concentration, turbidity and total suspended solids before and after each loading campaign should be published given the presence of trace metals in the sand. 3. Cumulative dust exposure could exceed health-based guidelines even if PM_{10} and TSP levels remain below limits, and cumulative exposure or seasonal variations may transport finer particles inland. Continuous 24-hour operations may lead to chronic noise exposure for workers and nearby residents. 4. Concerns regarding sediment re-suspension and potential smothering of benthic habitats given the proximity of Leschenault Inlet (approximately 360 m) and Vittoria Bay (approximately 1.3 km) and lack of ecological monitoring – such as benthic macro-invertebrate surveys. 5. No formal community engagement process undertaken. Requested at least two public information sessions should be held before the amendment is granted and a publicly available online dashboard with noise, dust, water quality	1. The department reviewed dust monitoring data required under condition 4 (previously condition 14) of the licence as part of this assessment (section 2.3.2). Neither the licence nor the trial conditions required monitoring of noise emissions, noting the department considered noise emissions as part of its risk assessment, however it was determined noise was assessed as part of the existing port operations and noise impacts are unlikely to change as the berth is already in use throughout the year. Port throughput of washed silica sand is only a small portion (<5%) of all port activities during the year, and therefore not expected to alter noise impacts. 2. The department notes that neither the licence nor trial conditions require monitoring of water quality at the premises. The port is an existing premises with washed silica sands shipments being less than 5% of port throughput. The department assessed the risk of impact to water to be low given the sands are entirely contained within rotaboxes until they are in the ship hold. Aligned with Guideline: Risk assessments and Guidance Statement - Setting Conditions, the delegated officer did not determine a need for water quality monitoring associated with washed silica sand shipment activities. 3. The department reviewed dust monitoring results required under condition 4 (previously condition 14) of the licence, noting the results are representative of the entire port activities, which informed the risk assessment. The risk assessment determined the risk of dust and noise impacts are low given the washed silica sand will be contained entirely within rotaboxes until in the ship's hold, the moisture content of the material must be compliant with dust extinction moisture levels and noise impacts will not be distinguishable from existing licence activities. The licence holder is required to ensure activities comply with the *EP Noise Regulations*. Additionally, the department notes as per section 3.1.2, the exclusion of workers from the assessment as protection of this party is provided for under the *Work Health and Safety Act 2020*. 4. The department reviewed the characteristics of the material (section 2.3.2) and determined there is no elevated risk of environmental impact based on the characteristics of the material. The department assessed the risk of impact to water to be low given the sands are entirely contained within rotaboxes until they are in the ship's hold and the dust extinction moisture content is to be met prior to shipment as per licence conditions. The risk of environmental impacts associated with the handling and loading of materials was assessed by the department (Section 3, Table 6) in accordance with its regulatory framework Guideline: Risk assessments and Guidance Statement - Setting Conditions

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and benthic habitat monitoring made available. 6. The risk assessment provided in the application is largely qualitative and may not satisfy evidentiary standards.	and controls have been applied in the licence to mitigate the risk of impacts to the marine environment. 5. The department notes it is not a specific requirement in the context of Part V of the EP Act for community engagement to occur. The department notes the port operates a Community Consultative Committee and provides information on activities on their website (Port Community Consultation Committees | Southern Ports and Current Shipping List | Southern Ports). The department conducted consultation on the application in accordance with Guideline: Industry Regulation Guide to Licensing.and advertised the application on 9 December 2025 for public comment. 6. Noted. The assessment in the application documents was conducted by the applicant, however the department has conducted its own risk assessment with the information provided, together with information reported to the department in accordance with licence conditions and applied risk based conditions in accordance with its regulatory framework Guideline: Risk assessments and Guidance Statement - Setting Conditions.