# **Decision Report**

# **Application for Works Approval**

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

Works Approval Number W6852/2023/1

**Applicant** Kimberley Ports Authority

File number DER2023/000549

Premises Port of Broome

Location 409 on Miscellaneous Plan 221193 Lots 616 and 956 on Deposited Plan 240107

Lot 621 on Deposited Plan 70861

Lots 650 and 651 on Deposited Plan 415214

Lot 698 on Deposited Plan 209491 Lot 848 on Deposited Plan 174017

**BROOME WA 6725** 

As defined by the coordinates in the Issued Works Approval

Date of report 30 January 2024

**Decision** Works approval granted

Melissa Chamberlain
A/MANAGER, RESOURCE INDUSTRIES

Officer delegated under section 20 of the Environmental Protection Act 1986

# **Table of Contents**

1.	Decis	Decision summary1						
2.	Scop	oe of assessment	1					
	2.1	Regulatory framework	1					
	2.2	Application summary and overview of premises	1					
		2.2.1 Exclusions	2					
		2.2.2 Part IV of the EP Act or other approvals	2					
3.	Risk	assessment	2					
	3.1	Source-pathways and receptors	2					
		3.1.1 Receptors	4					
	3.2	Risk ratings	9					
4.	Cons	sultation	14					
<b>5</b> .	Conc	clusion	21					
Refe	erence	es	21					
App	endix	1: Application validation summary	22					
Table	e 1: Pro	oposed applicant controls	2					
Table	e 2: Ser	ensitive human and environmental receptors and distance from prescribed	activity.5					
		sk assessment of potential emissions and discharges from the premises dense time limited operation						
Table	e 4: Coi	onsultation	14					
Fiauı	re 1: Dis	istance to sensitive receptors	8					

# 1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W6852/2023/1 has been granted.

# 2. Scope of assessment

### 2.1 Regulatory framework

In completing the assessment documented in this decision 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 <a href="https://dwer.wa.gov.au/regulatory-documents">https://dwer.wa.gov.au/regulatory-documents</a>.

### 2.2 Application summary and overview of premises

On 21 August 2023, Kimberley Ports Authority (the applicant) submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

This application relates to the unloading of mineral sands via rotating containers directly into ship cargo at the Broome Port (the premises).

The mineral sands product will be loaded into the rotating containers at the mine/source location, transported via road to one of two laydown areas at the premises then transported by a quad truck (or similar) to the premises wharf.

The premises operates 24 hours a day and is located approximately 3.7 km southwest of Broome township.

The proposed premises operation relates to the category 58 and its assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6852/2023/1. The equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W6852/2023/1.

Separate to the above, it should be noted that the premises is registered under category 86 of Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) for the bulk unloading of bulk bagged mineral sands. This includes the use of currently installed equipment such as the mobile harbour crane, spreader bar, reach stacker, forklift (quad truck), mechanical sweeper, and earth moving equipment (for use within the vessel).

#### 2.2.1 Exclusions

The department understands a wastewater treatment plant (WWTP) is operated within the boundary of the premises. The WWTP operated a throughput of approximately 3 m³ per day and is therefore below the trigger the prescribed activity of Category 54 under the EP Regulations. Therefore, the WWTP does not form part of this assessment.

### 2.2.2 Part IV of the EP Act or other approvals

The premises itself is not subject to regulation under Part IV of the EP Act. Activities at the premises are subject to conditions set out in Ministerial Statement 1080 published on 10 August 2018 and post-assessment changes were approved under s.45C on 8 November 2022. MS1080 conditions a proposal to construct and operate a heavy mineral sands mining operating on the Dampier Peninsula, and transportation of the products to the ports of Broome and Derby for export.

Ministerial Statement 1080 and the post-assessment changes authorise:

- Less than 50 return journeys (100 truck movements) per day between the Thunderbird Mineral Sands Project (mine site) and Port of Broome operating 24 hours per day.
- Exportation of up to 1.6 Mtpa bulk mineral sand products from the Port of Broome.

#### 3. Risk assessment

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

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

# 3.1 Source-pathways and receptors

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

**Table 1: Proposed applicant controls** 

Emission	Sources	Potential pathways	Proposed controls					
Construction	Construction							
Dust	Installation of air quality monitoring	Air/windborne pathway	No controls provided.					
Noise	equipment	causing impacts to health and amenity	No controls provided.					
Operation								
Hydrocarbons / chemicals	Hydrocarbons / chemicals storage	Contamination from leaks /	Fuel tanks are self-bunded.					

Emission	Sources	Potential pathways	Proposed controls
		spills	
Dust	Unloading of rotainers and potential fugitive dust originating from the containers within the laydown areas.  Potential fugitive dust originating from offloading and reloading the containers off of and onto trucks within the laydown areas.  Dust from emptying the rotainers into the vessel.	Air / windborne pathway causing impacts to health and amenity	At mine/source control:  Product loaded into containers and sealed at the mine/source location and inspected for remnant product before transport by road to the lay down areas at the premises.  Laydown Area control:  All roads leading to laydown areas are bitumen; laydown area 1 is also bitumen and laydown area 2 is gravel base  Container checking regime at mine and laydown  Premises control  The product (in rotating containers) will be loaded directly into a vessel via the mobile harbour crane.  Stevedore Safe Operations Procedure  Site inspections and audits  Hazard and Incident Reporting Procedures  Port of Broome Marine monitoring program which includes water and sediment sampling. See note 1 below.  A minimum of one dust monitor to be installed at the port to monitor dust during loading operations, and to also provide baseline information for the port  Complaints and incident reporting processes
Noise	Vehicle / machinery movements within the premises boundary.  Trucks and reach stackers used within the laydown areas for offloading of rotainers from trucks and reloading empty rotainers onto the trucks.  Mobile harbour crane used for unloading the rotainers.	Air (wind dispersion).	<ul> <li>Routine site inspections and audit programs</li> <li>Complaints and Incident Reporting Processes</li> <li>Multiple containers per truck to reduce truck movements.</li> <li>Traffic management plan</li> <li>Attended noise monitoring will be undertaken within the first 6 months of operations.</li> <li>There will be a noise monitoring procedure, which includes incident management, complaint management, noise management and plant safety management.</li> <li>Logistics provider using Performance Based Standard (PBS) trucks which have lower noise emissions</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
Contaminated stormwater	Dust (from spillage) contaminating stormwater	Stormwater from wharf, off roads and port lands entering the marine environment	<ul> <li>Loading method via bulk bags and/or rotating containers directly into the vessel cargo hold to prevent spillage.</li> <li>Empty containers will be temporarily placed on the wharf deck, then loaded back onto the truck for transport back to the laydown area and then mine</li> <li>Environmental Monitoring (Marine water and sediments) See note 1 below</li> <li>Procedures for product handling to avoid spillage.</li> <li>Regular housekeeping to remove spillage.</li> <li>Sealed hardstand</li> <li>Emergency management procedures, including prompt cleanup of spills and disposal.</li> <li>Loading will continue during light showers however, during heavy showers loading will be suspended and the hatches closed.</li> <li>For landing containers on the wharf there will spill kits available, brooms &amp; shovels and a designated waste bin. There will be a mechanical sweeping device on hand for larger spills and to clean the wharf after each shipment, which is consistent with other Port operations.</li> </ul>
Contaminated wash water and treated wastewater	Wastewater from the wash bay in the maintenance yard Wastewater from the WWTP in the maintenance yard	Discharge to land via leach drain  WWTP wastewater used to irrigate road verge	<ul> <li>Maintenance, cleaning, and inspections</li> <li>Pumping out pits and tanks and disposing of waste offsite.</li> <li>Wash down water Oily water separator entering environment.</li> <li>Monitoring regime with specified discharge criteria.</li> </ul>

Note 1: The licence holder currently undertakes annual marine monitoring and has committed to revising the ongoing marine monitoring plan to ensure ongoing port operations and developments are continued to be assessed against the values and objectives of the Environmental Protection Authority's (EPA) technical guidance 'Protecting the Quality of Western Australia's Marine Environment (EPA 2016). The licence holder has also stated that the marine monitoring that the licence holder has undertaken for the last 5 years will also continue in perpetuity as a voluntary measure to confirm that there is minimal environmental impact from the operations.

## 3.1.1 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 2 and Figure 1 below provides a summary of potential human and environmental

receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental Siting* (DWER 2020)).

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

Human receptors (category)	Human receptors (identification)	Distance from prescribed activity
Heritage site	Aboriginal and other heritage sites	Within premises boundary
	There are two registered Aboriginal sites identified as occurring within the Port and a National Heritage Listed site identified as The West Kimberley (Place ID 106063) is located within a 10 km radius of the site.	
	Three residences of state heritage significance are within Port boundary.	
Industrial areas within the premises boundary	TAMS Group and Kimberley Ports Authority Office	Approximately immediately adjacent to the laydown area and 1290 m west of the wharf
Residential	Residential (within port lands)	Approximately 85 m south southeast, 100 m east and 240 m southeast of the laydown areas and 1200m west of the wharf
Recreational users	Broome Dinosaur Adventures and Thousand Stars Bar and Café	Approximately 155m southeast of the laydown area and 1130 m northwest of the wharf
Industrial areas within the premises boundary	Atom Fuel Terminal	Approximately 230 m southeast of the laydown area and 1180 m west of the wharf
Industrial areas within the premises boundary	ВР	Approximately 260 m southeast of the laydown area and 1140 m west of the wharf
Industrial areas within close proximity to the premises boundary	Broome industrial estate	Approximately 280 m north of the laydown area and 1700 m northwest of the wharf
Industrial areas within the premises boundary	Maintenance Yard	Approximately 390m southeast of the laydown area and 920 m west of the wharf
Recreational users	Port Jetty Public Toilets	Approximately 530 m southeast of the laydown area and 830 m west of the wharf
Industrial areas within the premises boundary	Department of Primary Industries and Regional Development	Approximately 560 m southeast of the laydown area and 800 m

		west of the wharf
Industrial areas within the premises boundary	Toll Mermaid Logistics (not currently operational)	Approximately 600 m southeast of the laydown area 870 m southwest of the wharf
Recreational users	Broome Volunteer Sea Rescue Group and Broome Fishing Club	Approximately 650m southeast of laydown area and 1080 m southwest of the wharf
Community facility	Broome Pistol Club and Overflow Caravan Park	Approximately 960m northeast of laydown area and 1600 m northwest of the wharf
Sensitive tourism	Habitat Resort Broome	Approximately 1500m north east of the laydown area and 2000 m north-northwest of the wharf
Sensitive tourism	Broome Golf Club	Approximately 1750m north east of the laydown area and 2000 m northwest of the wharf
Environmental receptors (category)	Environmental receptors (identification)	Distance from prescribed activity
	Groundwater	At approximately 10m below ground level
Aquaculture	Environmentally Sensitive Areas (ESA)	Within the site
	The site is located within an ESA identified as a Threatened Ecological Community (TEC)	
Marine environment	The Indian Ocean	Directly adjacent
Marine environment	Yawuru Nagulagun / Roebuck Bay Marine Park, which is jointly managed by the Department of Biodiversity, Conservation and Attractions (DBCA) and Nyamba Buru Yawuru Ltd	Surrounds the port on all sides
Aquaculture	Threatened Ecological Communities	Within 10 km  Note: due to the distance from
	The Protected Matters Search Tool (PMST) identified one Threatened Ecological Community, Monsoon Vine Thickets on the coastal sand dunes of Dampier Peninsula as potentially occurring within a 10 km radius of the site.	the prescribed activity this receptor has been screened from the risk assessment.
Ecology	Threatened and/or priority flora and	Within 10 km
	1	<u> </u>

	fauna The PSMT shows that there are 35 threatened species and 67 migratory species potentially occurring within a 10 km radius of the site.	Note: due to the distance from the prescribed activity this receptor has been screened from the risk assessment.
Aquaculture	Roebuck Bay RAMSAR Wetland	Approximately 10 km west of the port
		Note: due to the distance from the prescribed activity this receptor has been screened from the risk assessment.

Broome Golf Club Resort Broome Industrial Area Caravan Park and Fistol Club 1.6km Broome Dinosaur Adventure 1.7k 1.1km 1.2k 200 400 600 800 m Meters

Figure 1: Distance to sensitive receptors

## 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for 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 works approval 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 3.

Works approval W6852/2023/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

Table 3: Risk assessment of potential emissions and discharges from the premises during construction and time limited operation

Risk events			Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls		
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction								
Installation of air	Dust	Air / windborne pathway causing impacts to health and amenity	Residences 85m south-east and 100m east  Industrial areas within close proximity to or within the premises boundary  Recreational users within the premises boundary  Aboriginal heritage listed site	C = Slight L = Unlikely Low Risk		Conditions 1, 2, 4, 5	Installing the equipment in accordance with the corresponding design requirements is likely to reduce to risk of excess dust emissions.  Installation is expected to occur over a short period	
quality monitoring equipment	Noise				C = Slight L = Unlikely Low Risk	N/A	Conditions 1, 2, 4, 5	Installing the equipment in accordance with the corresponding design requirements is likely to limit the amount of noise produced during installation.  Installation is expected to occur over a short period
Operation (including time-limited-operations operations)								
Materials handled via rotating container unloading system.  Unloading of rotainers and potential fugitive dust originating from	Dust	Air / windborne pathway causing impacts to health and amenity	Residences 85m south-east and 100m east of the southern laydown area Recreational users within the	Refer to Section 3.1	C = Minor L = Possible <b>Medium Risk</b>	Y	Conditions 7, 8 and 17	Modelling provided indicated that there is not anticipated to be any exceedances of parameters at sensitive receptors. The applicant has proposed to undertake air quality monitoring during time limited operations to verify the

Risk events	Risk events						Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
the containers within the laydown areas.			premises boundary					model and inform ongoing air monitoring requirements for a future licence application.
Potential fugitive dust originating from offloading and reloading the containers off of and onto trucks within the laydown areas.			Fishing club and Broome Sea Rescue 650m southeast of laydown of the southern laydown area Industrial areas within the premises boundary					The Delegated Officer considers the addition of dust deposition monitoring to be necessary to provide sufficient data for use in a future licence assessment.  Additionally, the applicant is encouraged to liaise with Department of Health regarding dust characterization and the need for additional monitoring requirements for respirable silica content.
			Marine Environment immediately adjacent to the premises boundary		C = Minor L = Possible <b>Medium Risk</b>	Y	N/A	N/A
	Product laden stormwater	Stormwater from wharf, roads and port lands entering the marine environment	Marine Environment immediately adjacent to the premises boundary		C = Minor L = Likely <b>Medium Risk</b>	Y	Condition 12	The department considers that the current marine monitoring plan is sufficient for mitigating environmental risk to the marine environment and notes the applicant's commitment to updating the

Risk events	Risk events						Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
			Aquaculture immediately adjacent to the premises boundary					current plan and carrying out continued voluntary monitoring.
	Contaminated water from the wash bay located in the maintenance yard.	Discharge to land via leach drain	Soil Groundwater  Marine Environment immediately adjacent to the premises boundary  Aquaculture immediately adjacent to the premises boundary		C = Minor L = Possible <b>Medium Risk</b>	Y	Conditions 10 and 11	N/A
Vehicle / machinery (such as trucks, reach stacker and mobile harbour crane) movements within the premises boundary.	Noise	Air / windborne pathway causing impacts to health and amenity	Residences 85m south-east and 100m east of the southern laydown area Industrial areas within close proximity to or within the	Refer to Section 3.1	C = Moderate L = Likely <b>High Risk</b>	N	Conditions 13-16	The Delegated Officer considers that noise verification is required during time limited operations to verify that noise will meet the Noise Regulations and inform the risk assessment for any future licence application.  In the event that noise monitoring indicates that the

Risk events		Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls			
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
			premises boundary Sensitive tourism Community facility					Noise Regulations are unlikely to be met, the works approval holder will be required to propose measures to be implemented to mitigate noise emissions and ensure compliance with the Noise Regulations.
	Spills or leaks of hydrocarbons	Permeate the onsite soil	Soil Groundwater	Refer to Section 3.1	C = Minor L = Possible Medium Risk	Y	Condition 9	N/A

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

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

# 4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

**Table 4: Consultation** 

Consultation method	Comments received	Department response		
Application advertised on the department's website on 6 November 2023	No response provided	N/A		
Application advertised in The West Australian on 6 November 2023, and again on 13 November 2023 due to incorrect suburb  One submission from the Conservation Council of WA	Dust:  (a) Concerned that the Port may not be sufficiently equipped to manage dust emissions or an unplanned spill of product as the method of loading does not eliminate dust.  (b) Residents may not have been fully informed of the potential human-health risks associated with the operation. No human health studies are proposed.  (c) Radiological risk should be monitored for the potential risk to site uses and visitors, and to the environment.  (d) Location of air quality monitoring stations is not detailed.  (e) Management of contamination within containers temporarily stored on the wharf is not detailed.  Stormwater:  (f) Product laden stormwater may enter the environment.	<ul> <li>(a) Dust emissions have been risk assessed as part of this application and suitable controls have been placed on the licence to mitigate this risk.</li> <li>(b) Impacts to residential receptors has been risk assessed as part of this application, and the applicant is encouraged to provide further community consultation.</li> <li>(c) Radiological risks are managed under the Radiation Safety Act 975 and the Mines Safety and Inspection Act 1994 and do not form part of this assessment.</li> <li>(d) It is acknowledged that current air quality monitoring stations have not been determined and will be required to be specified by a suitably qualified person prior to the commencement of time limited operations. The department will review the data collected to inform the specific monitoring that is required for ongoing operations under a future licence application.</li> <li>(e) Controls provided by the applicant are likely to mitigate contamination issues and specific controls have been required within the licence.</li> <li>(f) Potentially contaminated stormwater emissions have been risk assessed as part of this application and suitable controls have been placed on the licence to mitigate this risk.</li> </ul>		
	Environmental monitoring:	(g) The risk assessment considers emissions and discharges from		

		the premises and where relevant	
	(g) No cumulative environmental impact	the premises and where relevant considers cumulative impacts from nearby properties in determining consequence and likelihood of an emission.	
	<ul> <li>(h) The current ongoing monitoring program is not designed for the mineral sands industry and the types of contaminants that would be common for this industry and is insufficient to detect and rapidly respond to environmental impact.</li> <li>(i) Current wastewater processing only screens oils before discharge to the environment.</li> <li>(j) Is the bunding sufficient to prevent spills discharging to the marine environment?</li> <li>(k) No assessment of uptake by flora and fauna within the marine ecosystem</li> <li>(l) There does not appear to be an assessment of the risks to marine.</li> </ul>	<ul> <li>(h) Potential emissions to the marine environment have been risk assessed as part of this application and suitable controls have been placed on the licence to mitigate this risk. Additionally, requirements have been placed on the licence to require updates to the marine monitoring program.</li> <li>(i) Treatment of wastewater is not considered as part of this assessment.</li> <li>(j) This assessment has considered risk of spills to the marine environment and the works approval contains conditions to mitigate this risk.</li> <li>(k) Addressed in point (h) above</li> </ul>	
	assessment of the risks to marine Matters of National Environmental Significance (MNES) from additional ship movements.	(I) DWER internal technical advice indicates that the current marine monitoring plan is sufficient, although could be updated to consider current guidance. The risk assessment has determined that impacts to marine is acceptable subject to controls including an updated marine monitoring plan.	
	The proposal should be referred to EPA as a significant proposal and assessed under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	MS 1080 issued in August 2018 outlines part IV requirements in relation to shopping of material from the Broome Port.	
An assessment of marine wildlife movements should be employed to determine the risks from the additional shipping movements in the area.		Potential emissions to the marine environment have been risk assessed as part of this application and suitable controls have been placed on the licence to mitigate this risk. Additionally, requirements have been placed on the licence to require updates to the marine monitoring program.	
Application advertised in local newspaper, The Broome Advertiser on 16 November 2023	No comments received	N/A	

Local Government Authority (Shire of Broome) advised of proposal on 14 November 2023

- (a) The Local Planning Scheme number has changed from 6 to 7 and any future document should reflect this.
- (b) References to ship loading states expected to be 60 ships per annum, this is conditioned under the S45c variation to maximum of 1.6Mtpa and that should be confirmed in this application.
- (c) The modelling completed in section 6.1 is for Derby Port this should be updated to reflect the testing that has been undertaken for Broome Port.
- (d) Section 6.2.2 does not refer to any impacts of traffic and does not refer to any Traffic Impact Assessment or Statement, the Shire understands that this was supposed to be completed and should in included in this application before it is approved.
- (e) The applicant requires an amended wastewater application to be submitted to the Shire and Department of Health as per the Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974.
- (f) The air quality assessment did not include tourism operators mooring their boats from the port as sensitive receivers. They should be consulted and included in this assessment.
- (g) Has it been explained to the operators of the hovercraft base that the predicted PM10 concentrations at receptors (μg/m3), will double the background PM10 and may impact their business operation? How was this consultation with this business conducted?
- (h) Any modelling of noise should include conditions where the shed is removed. The Shire supports the recommendation that further investigation is undertaken to confirm whether there is an

- (a) Noted
- (b) The works approval application and therefore the works approval assessment is based on the maximum amount of handled mineral sands of 1.6 Mega tonnes per annum.
- (c) This appears to be a typographical error and has not affected the assessment of this works approval.
- (d) Traffic movements are not assessed by DWER and are not included in this application. This is a matter for The Shire of Broome.
- (e) The wastewater treatment plant is below threshold and is therefore excluded from this assessment. However, this matter should be noted by the applicant.
- (f) Noted and the applicant is encouraged to consider tourism operators in their dust monitoring regime.
- (g) Potential dust emissions have been risk assessed as part of this application and suitable controls have been placed on the licence to mitigate this risk. The applicant will be required to undertake a comprehensive air quality monitoring program. The applicant is encouraged to consult with all potentially affected stakeholders.
- (h) Potential noise emissions have been risk assessed as part of this application and suitable controls have been placed on the licence to mitigate this risk. The applicant will be required to undertake noise verification monitoring to determine noise impacts from operations and where applicable introduce additional control measures.
- (i) Potential emissions to the marine environment have been risk assessed as part of this application and suitable controls have been placed on

·	<u>,                                      </u>	
	exceedance at key residential receptors for open wharf fodder loading, through measurement at receptor or reference location. The monitoring or measurement should be during typical Broome 'worst case' winds towards the monitoring location. If required, options to mitigate fodder loading noise emissions include:  a. Noise mitigation of the fodder loading unit(s) b. Use of temporary acoustic barrier(s)  (i) The Shire also supports the recommendation that KPA implement the revised Broome Port Marine Environmental Quality Sampling and Analysis Plan as recently developed that includes reference to sample sites outside of the port.	the licence to mitigate this risk. The applicant will be required to provide an updated marine monitoring plan.
Department of Planning, Lands and Heritage advised of proposal on 14 November 2023	The prescribed premises lies within areas identified as Aboriginal Sites and Heritage Places. Any proposed activity within the Aboriginal Sites and Heritage Places will require approval under the Aboriginal Heritage Act 1972.	The applicant will be informed of their duties to apply for approval under the Aboriginal Heritage Act 1972.
Department of Biodiversity, Conservation and Attractions advised of proposal on 14 November 2023	No response provided	N/A
Department of Transport advised of proposal on 14 November 2023	No response provided	N/A
Main Roads advised of proposal on 14 November 2023	No response provided	N/A
Bill Reed advised of proposal on 14 November 2023	No response provided	N/A
Broome Dinosaur Adventures advised	(a) Further work to clearly provide evidence the dust will	(a) Potential dust emissions have been risk assessed as

of proposal on 14 November 2023	(b) (c)	not be a health hazard to the community and visitors  Further work to explain how any material spilled into the marine environment will not adversely affect the National Heritage Values of the Broome sandstone and associated ichnofossils  Management on 17 October 2023 Exercise Roebuck Bay Challenge was held at the Port of Broome. The exercise also highlighted that KPA does not hold all the equipment required to respond to a major incidence and it is assumed that this means KPA's ability to respond will be constrained.  To confirm that the findings from Exercise Roebuck Bay Challenge have informed the proposed practices, procedures and emergency responses.	(b) (c)	part of this application and suitable controls have been placed on the licence to mitigate this risk. The applicant will be required to undertake a comprehensive air quality monitoring program. The applicant is encouraged to consult with all potentially affected stakeholders.  Potential emissions to the marine environment have been risk assessed as part of this application and suitable controls have been placed on the licence to mitigate this risk. The applicant will be required to provide an updated marine monitoring plan.  The works approval contains controls required to mitigate risk to the environment and it is the responsibility of the applicant to ensure they have the necessary equipment to respond appropriately.  The works approval holder is required to comply with all conditions of the works approval, and should
				consider whether learnings from the Roebuck Bay Challenge inform the ability
				to respond as necessary.
Broome Fishing Club advised of proposal on 14 November 2023	No res	sponse provided	N/A	
Broome Golf Club advised of proposal on 14 November 2023	No res	sponse provided	N/A	
Habitat Resort Broome advised of proposal on 14 November 2023	(a) (b)	Noise assessment did not consider Habitat Resort (HR) as a sensitive receptor.  The acoustic modelling didn't	(a)	Potential noise emissions have been risk assessed as part of this application and suitable controls have been placed on the licence to
	(c)	take into account the truck movements.  The EPA Noise Regs		mitigate this risk. The applicant is required to undertake noise verification modelling.
	(6)	definition of road does not include a wharf therefore surface noise from the road should be included in the	(a)	As truck movements on roads are not regulated under the Environmental Protection (Noise)

modelling.

- (d) The acoustic modelling indicates the gun club is likely to be subject to potential exceedances of noise levels. As HR is adjacent to the gun club it is likely the noise level at HR will also exceed assigned noise levels.
- (e) HR should be notified when certain climatic and meteorological conditions are predicted to result in exceedances of noise levels, as outlined in the acoustic modeling report, and outline what times the loading operations will cease.
- (f) An annual monitoring report should be complied and made available publicly within 14 days after each 12 month interval.
- (g) Any approval will need to have a limited duration (suggested 3 years) after which recorded data will be made available for public scrutiny. Any subsequent renewal will depend on data analysis, complaints received and clarification of further mitigation strategies.
- (h) The KPA should be required to establish a proper consultative committee that includes actual stakeholders and should be required to meet quarterly for the first three years, with minutes of the meetings submitted to the EPA for recording on the file.

- Regulations 1997 (EP Noise Regs), they have not been considered under this works approval.
- (b) As the sealed road is publicly accessible up until the gated portion of the road adjacent to the entrance to the jetty. The EP Noise Regs do not apply to the road adjacent within the land-based portion of the port.
- (c) Potential noise emissions have been risk assessed as part of this application and suitable controls have been placed on the licence to mitigate this risk. Noise verification monitoring will be required during time limited operations to confirm assigned levels can be met and where not, suitable additional controls implemented.
- (d) Notifying sensitive receptors is outside the scope of works approval conditions however the applicant is encouraged to maintain contact with nearby receptors.
- Annual Audit Compliance (e) Reports are made publicly available on DWER's website. Other monitoring data is not routinely made available to the public however it may be requested through Freedom of Information requests. Additionally the applicant may wish to make copies of monitoring data available to the public or registered stakeholders at their discretion.
- (f) A works approval is the first step in securing a licence. The site can perform operations for up to 180 days (time limited operations) before they need to be licenced. Monitoring results obtained during the first 180 days of operation will be used to assess what conditions are required for a full licence. A future licence application will be made

		available to the public for comment.  (g) This is not regulated under Part V of the Environmental Protection Act 1986, however the applicant is encouraged to consult with members of the community.
Marie Gamble advised of proposal on 14 November 2023	No response provided	N/A
Nini Mills – Nyamba Buru Yawuru advised of proposal on 14 November 2023	No response provided	N/A
Roebuck Bay Working Group advised of proposal on 14 November 2023	No response provided	N/A
Applicant was provided with draft documents on 22 Jan 2023	(a) Request to clarify requirement for Aboriginal Heritage Act 1972 as noted in cover letter.  (b) Request to remove reference to storage limit as this was removed with recent section 45C to the Ministerial Statement  (c) Request to limit infrastructure to air quality monitor only as other infrastructure is part of normal port operations and noise monitoring is attended  (d) Request to reword draft conditions 12-14 to avoid duplication  (e) Request to remove conditions related to Marine Monitoring Plan as the applicant is already in the process of undertaking this  (f) Minor typos and updates to implement requested changes noted	<ul> <li>(a) Detail included in letter for information only, and is summarised in DPLH comments above.</li> <li>(b) Change noted and reference to storage limit is removed</li> <li>(c) Infrastructure table is updated to only refer to monitors within the works approval which trigger time limited operations. A future operating licence for the premises may include more detailed list of operating infrastructure for ongoing operations.</li> <li>(d) Conditions reworded into a single condition</li> <li>(e) Request accepted as the current plan is considered to be suitable, and it is noted that the applicant is already updating the plan as per the draft condition requirements. A future operating licence for the premises may review the need for any marine monitoring conditions</li> <li>(f) Noted and updated</li> </ul>

### 5. Conclusion

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

### References

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

# **Appendix 1: Application validation summary**

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)				
Application type				
Works approval ⊠		W6852/2023/1		
Date application received		29/08/2023		
Applicant and premises details				
Applicant name/s (full legal name/s)		Kimberley Ports Authority		
Premises name		Port of Broome		
Premises location		Location 409 on Miscellaneous Plan 221193 Lots 616 and 956 on Deposited Plan 240107 Lot 621 on Deposited Plan 70861 Lots 650 and 651 on Deposited Plan 415214 Lot 698 on Deposited Plan 209491 Lot 848 on Deposited Plan 174017 BROOME WA 6725		
Local Government Authority		Shire of Broome		
Application documents				
HPCM file reference number:		DER2023/000549		
Key application documents (additional to application form):			g Documentation nmental Management Plan ual Summary Report nary Report nt	
Scope of application/assessment				
Summary of proposed activities or changes to existing operations.		equipment.  The proposed operation cor	air quality and acoustic monitoring mprises of the unloading of mineral s directly into ship cargo at the	
Category number/s (activities that cause the premises to become prescribed premises)				
Table 1: Prescribed premises categories				
Prescribed premises category and description	Pro	posed production or sign capacity		
Category 58: Bulk material loading or unloading		00,000 tonnes per annum of k minral sands		
Legislative context and other approvals				
Has the applicant referred, or do they		Yes □ No ⊠	Referral decision No:	

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)				
intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?		Managed under Part V ⊠ Assessed under Part IV □		
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ⊠ No □	Ministerial statement No: MS1080 EPA Report No: 1606 Thunderbird Mineral Sands Project		
Has the proposal been referred and/or assessed under the EPBC Act?	Yes □ No ⊠	N/A		
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ⊠ No □	Certificate of title ⊠  General lease □ Expiry:  Mining lease / tenement □ Expiry:  Other evidence □ Expiry:		
Has the applicant obtained all relevant planning approvals?	Yes □ No □ N/A ⊠	Approval: N/A Expiry date: N/A		
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes □ No ⊠	CPS No: N/A No clearing is proposed.		
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes □ No ⊠	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.		
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes □ No ⊠	Application reference No: N/A Licence/permit No: N/A Licence / permit not required.		
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes □ No ⊠	Name: N/A Type: N/A Has Regulatory Services (Water) been consulted? Yes □ No □ N/A ⊠ Regional office: North West		

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)				
		Name: N/A		
		Priority: N/A		
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)?		
		Yes □ No □ N/A ⊠		
Is the Premises subject to any other Acts		Dangerous Goods Safety Act 2004		
or subsidiary regulations (e.g. Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx)	Yes ⊠ No □	Environmental Protection (Controlled Waste) Regulations 2004		
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠	N/A		
Is the Premises subject to any EPP requirements?	Yes □ No ⊠	N/A		
Is the Premises a known or suspected		Classification:		
contaminated site under the Contaminated Sites Act 2003?	Yes ⊠ No □	Contaminated - remediation required		
		Remediated for restricted use		
		Date of classification: Multiple dates		
		The two 'Contaminated – remediation required' lots have been remediated and documentation submitted to DWER to progress the reclassification to 'Remediated for restricted use'.		