Licence number L9445/2024/1

Licence holder Kimberley Ports Authority

Registered business address 549 Port Drive

BROOME WA 6725

DWER file number INS-0002950

Duration 06/06/2025 to 05/06/2045

Date of issue 06/06/2025

Date of amendment 06/11/2025

Premises details 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

MINYIRR WA 6725

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 58: Bulk material loading or unloading (premises on which clinker, coal, ore, ore concentrate, or any other bulk granular material is loaded onto or unloaded from vessels by an open materials loading system	1,600,000 tonnes per annum (tpa)
Category 82: Boat building and maintenance: (premises on which vessels are commercially built or maintained and organotin compounds are not used or removed from vessels)	N/A

This licence is granted to the licence holder, subject to the attached conditions, on 6 November 2025, by:

SENIOR MANAGER, RESOURCE INDUSTRIES

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

Licence history

Date	Reference number	Summary of changes		
06/06/2025	L9445/2024/1	Licence granted		
		Licence amendment:		
		 Including the new Kimberley Marine Support Base (KMSB) wharf facility to the licence. 		
06/11/2025	L9445/2024/1	 Removing the time limiting condition related to Laydown Area 3 whilst adding noise bunding condition. 		
		Extending the prescribed premises boundary to incorporate the new loading facility.		
		Changes to monitoring of meteorological and marine conditions.		

Interpretation

In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

Trial conditions

Notification of a Trial

- 1. The licence holder must notify the CEO of a Trial and such notification (which the CEO will make publicly available) must:
 - (a) be in writing;
 - (b) be made 30 calendar days or more prior to the Trial Commencement Date;
 - (c) include the details of the nature of the Trial, including whether the Trial is for:
 - (i) the loading or unloading of a bulk granular material, not specified in <u>Table</u> 6, Schedule 3 of this licence, at the premises; or
 - (ii) the loading or unloading of a bulk granular material, specified in <u>Table 6</u>, Schedule 3 of this licence, at the premises using a handling method not specified by any other condition of this licence; or
 - (iii) the loading or unloading of a new bulk granular material, not specified in <u>Table 6</u>, Schedule 3 of this licence, at the premises using a handling method not specified by any other condition in this licence.
 - (d) include details of the extent of the Trial, including:
 - (i) the duration and frequency of any loading or unloading activities;
 - (ii) method for materials storage and handling including any changes to infrastructure and equipment used at the premises; and
 - (iii) all controls to be implemented for the management of emissions and discharges;
 - (e) include details of the nature of bulk granular material, including:
 - (i) all public health and ecosystem hazards;
 - (ii) the chemical and geochemical composition;
 - (iii) particle size distribution of bulk granular material including inhalable and respirable fractions;
 - (iv) the representative DEM level, where determination of DEM is possible for that material; and
 - (v) leachate testing conducted on materials that may present a toxicological or ecotoxicological risk;
 - (f) include an analysis of risks to the environment, public health and amenity from potential discharges, dust, odour and noise emissions associated with the Trial;
 - (g) include a monitoring plan that includes, but is not limited to:
 - (i) the indicator parameter/s to be monitored;
 - (ii) monitoring locations, equipment used and proximity to sensitive receptors;
 - (iii) monitoring frequencies;
 - (iv) monitoring averaging periods; and
 - (v) any meteorological monitoring to be undertaken; and

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- (h) only when a CEO notification to cease a Trial has been issued in accordance with Condition 2, and in the event that the licence holder is submitting a Trial amendment notification, then the licence holder must:
 - (i) resubmit the requirements of Conditions 1((a) (g));
 - (ii) address the issues that resulted in the notification to cease the Trial on the initial (or any subsequent) Trial for the same product; and
 - (iii) include a new Trial end date calculated 12 months from the commencement of the first shipment of the ceased Trial, not including time elapsed between the CEO notification to cease that Trial and the Trial amendment notification.

CEO notification to cease a Trial (prior to commencement or during)

- **2.** The licence holder must cease a Trial in the manner and at the time, when:
 - (a) the CEO forms the view, acting reasonably:
 - (i) that following an assessment of the information provided as part of Condition 1, it is determined that the proposed Trial will result in unacceptable impact on public health, amenity or the environment; or
 - (ii) that following a review of any data received in accordance with Condition 6, it is determined that the Trial is having an unacceptable impact on public health, amenity or the environment; or
 - that the Trial being undertaken is different in any manner from that described in the notification provided by the licence holder through Condition 1, when that difference is resulting in, or is likely to result in, an unacceptable impact on public health, amenity or the environment; and
 - (b) the CEO has provided written notice to cease the Trial (which the CEO will make publicly available) to the licence holder specifying the grounds for the CEO's views.

Nothing in this Condition prevents the licence holder subsequently submitting an amendment in relation to the Trial. Any Trial amendment proposed by the licence holder must follow the notification requirements as per Condition 1(h).

Trial Restrictions

- **3.** Product received for the purpose of a trial must only be stored on the premises prior to the commencement of the first shipment for a maximum period of:
 - (a) six weeks when being stored outside of enclosed infrastructure; or
 - (b) three months when being stored inside enclosed infrastructure.
- **4.** The Trial must cease:
 - (a) 12 months from the date of the commencement of the first shipment; or
 - (b) immediately after the shipment where the cumulative throughput amounts exceed 1,000,000 tonnes; or
 - (c) where the Trial is for a new material handling method not specified by any other condition in this licence, 12 months from the date of the commencement of the handling method; or
 - (d) immediately upon receipt of a CEO notification to cease a Trial in accordance with Condition 2,

whichever occurs first.

A Trial may only recommence upon notification of a Trial amendment, in accordance with Condition 1(h).

5. The licence holder must not Trial the bulk handling of materials that:

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- (a) Contain asbestos in concentrations equal to or greater than 0.01% w/w for non-friable asbestos or 0.01% w/w for fibrous asbestos;
- (b) Contain respirable silica equal to or greater than 1% w/w;
- (c) Exceed the radiation transport limit of 10 Bq/g for Uranium-238 and Thorium-232 combined;
- (d) Exceed Rubidium-87 concentrations of 30 Bq/g; or
- (e) Are classified as tailings, construction or demolition waste, or hazardous waste.

Reporting

- **6.** The licence holder must submit a report to the CEO which includes the results of monitoring required by Condition 1(g), and includes:
 - (a) the 15-minute averaged, raw data in tabulated format;
 - (b) a graphical representation of the monitoring results for each Trial shipment with a comparison against 15-minute averaged meteorological (wind speed and direction) monitoring data;
 - (c) Moisture Content data averaged over each Trial shipment and showing a comparison against the representative DEM level, where the DEM level can be determined; and
 - (d) a summary of the effectiveness of the controls implemented for the management of emissions and discharges,

within 30 days of the completion of the first Trial shipment; at four, seven and 10 months from the first Trial shipment; and a final closeout report within 30 days following the cessation of the Trial.

7. The licence holder must record the date of the product for the purpose of a trial has been received on the premises and include the date with the first report to the CEO as required in Condition 6.

Ongoing shipments and handling

8. In the event that approval is sought for the ongoing shipments of the Trial material, or for the ongoing use of the Trial material handling method, the licence holder must provide an application for licence amendment or works approval, along with a report fulfilling the requirements of Condition 6, at least three months prior to the completion of the Trial period.

Infrastructure and equipment

9. The licence holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1 Infrastructure and equipment requirements

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1	Continuous Australian Standard PM ₁₀ monitor	 Compliant with Australian Standard methods for sampling and analysis Provides data at minimum 1-hour intervals 	Monitoring location L1 as shown on Figure 1 of Schedule 1
2	Shiploading infrastructure and vessels, including: Mobile harbour crane Rotating containers ("rotainers") used to transport mineral sands from Thunderbird Mine Site	 No more than 1,600,000 tonnes per annum (tpa) of product (mineral sand) may be exported from the premises Loading activities only to occur within the designated Port wharf areas Mineral sands are to be loaded in sealed rotainers that are emptied into the hold of the vessel using a rotating tipping frame Rotainers must not be opened until they are positioned within the vessel hold at a vertical drop height of less than 2 metres from the hold of the vessel (or height of deposited product) Following each shipment of mineral sands, areas where mineral sand was loaded and transported including, but not limited to, the wharf and the trafficable route in and out of that wharf, must be inspected and swept if product remains. Mineral sands moisture content must be at least 5% weight in weight (w/w) for each shipment, with details of moisture content recorded and maintained 	Wharf area between premises boundary points 37 to 50 as shown on Figure 1 of Schedule 1
3	Laydown areas 1 and 3	 Stormwater within mineral sands laydown areas must be directed to stormwater basins, or equivalent within the laydown area Operations at Laydown Area 3 can only occur when appropriate controls (i.e. stacked containers) during night period operations are implemented when a resident is occupying a relevant residence. 	Laydown areas 1 and 3 as shown on Figure 1 of Schedule 1

Monitoring

Air quality monitoring

- 10. All sample analysis must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for the relevant parameters.
- **11.** The licence holder must undertake or obtain air quality and meteorological monitoring:
 - (a) at the monitoring stations;
 - (b) for the parameters;
 - (c) calculated as an average over the period;
 - (d) at the frequency;
 - (e) in accordance with the method;

specified in Table 2.

Table 2 Air quality and meteorological monitoring

Monitoring point reference	Parameter	Unit ¹	Averaging Period	Frequency	Sampling / monitoring method
Australian Standard PM ₁₀ monitor at location L1 (as shown in Figure 1)	Particles as PM ₁₀	μg/m³	24-hour average	Continuous	AS 3580.9.11
Meteorological data sourced from	Wind Speed	m/s			
the Bureau of Meteorology Broome NTC AWS Station, ID: 033102	Wind direction	degrees	10 minutes	Continuous	N/A

Note 1: All units are referenced to STP dry.

Marine monitoring

- **12.** The licence holder must complete ambient marine monitoring that assesses environmental impacts associated with mineral sands loading activities at the premises. The assessment must include:
 - (a) Biannual (twice a year) water quality sampling at a minimum three (3) locations within the study area displayed in Figure 2 that includes measurement of the following parameters: Turbidity (NTU¹), dissolved oxygen (mg/L), temperature (°C), electrical conductivity (mS/cm), pH and metals (including aluminium, arsenic, barium, cadmium, chromium², cobalt, copper, lead, nickel, zinc, iron and mercury);

¹ Nephelometric Turbidity Unit

² Cr III a

- (b) Annual intertidal benthic community habitat monitoring at the five (5) intertidal locations within small bay west displayed on <u>Figure 3</u> that includes a mangrove health assessment;
- (c) Annual subtidal benthic community habitat monitoring at ten (10) designated tow video locations displayed in Figure 3 that includes an annual assessment of benthic community habitat associations and health, with more detailed five yearly habitat mapping program for assessment of benthic community habitat associations and percentage cover within the mapping boundary;
- (d) Five yearly (once every five years) benthic infauna monitoring at a minimum of six (6) locations within the study area displayed in Figure 2 that includes collection of sediment samples for identification of macroinvertebrates to Family taxonomic level and analysis and reporting of the following species diversity indices: Margalef's index (d), Shannon's index (H), Evenness index (EH) and Dominance (D); and
- (e) Five yearly (once every five years) sediment sampling at a minimum eleven (11) locations displayed in <u>Figure 2</u> that includes measurement of the following parameters: metals (including aluminium, arsenic, barium, cadmium, chromium³, cobalt, copper, lead, nickel, zinc, iron and mercury).

Records and reporting

Records

- 13. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
 - (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or other issues raised; and
 - (d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
- **14.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
 - (a) the calculation of fees payable in respect of this licence;
 - (b) any maintenance of infrastructure that is performed in the course of complying with condition 9 of this licence;
 - (c) monitoring programmes undertaken in accordance with condition 10 of this licence; and
 - (d) complaints received under condition 13 of this licence.

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³ Cr III a

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- **15.** The books specified under condition 14 must:
 - (a) be legible;
 - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - (c) be retained by the licence holder for the duration of the licence; and
 - (d) be available to be produced to an inspector or the CEO as required.

Reporting

16. The licence holder must:

- (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period, and
- (b) prepare and submit to the CEO an Annual Audit Compliance Report in the approved form by 5 August each year.

17. The licence holder must:

- (a) prepare an Environmental Report that provides information in accordance with <u>Table 3</u> for the preceding annual period, and
- (b) submit that Environmental Report to the CEO by 5 August each year.

Table 3 Environmental reporting requirements

Condition	Requirement			
9	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken			
	Air quality monitoring, including raw monitoring data and detailed analysis. This analysis should include, but is not limited to:			
11	Detailed investigations of NEPM criteria exceedances, including description of limit exceedances, date of exceedance, as well as investigative and corrective actions taken. Investigation should include risk assessment of the exceedance parameter.			
	Polar plots			
	Time series data paired with ship loading activities			
	Identification of seasonal trends and worst-case conditions for dust			
	Analytical data and relevant shiploading dates (for campaign-based monitoring) provided in tabulated form.			
	Ambient marine monitoring, including tabulated data and detailed analysis including, but not limited to:			
	a summary of results;			
12	an assessment of any trends in data including assessment of current results as compared to previous reporting periods; and			
12	assessment of monitoring results against any targets/limits specified in Australian and New Zealand Guidelines for Fresh and Marine Water Quality			
	any recommendations for the improvement of the monitoring program and/or modifications for management of mineral sands handling and loading operations to reduce impact.			
13	Complaints summary			

Definitions

In this licence, the terms in <u>Table 4</u> have the meanings defined.

Table 4 Definitions

Term	Definition		
ACN	Australian Company Number		
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates are available on the Department's website).		
annual period	a 12-month period commencing from 6 th June until 5 th June of the immediately following year.		
Australian and New Zealand Guidelines for Fresh and Marine Water Quality	means the current version of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality published by the Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia. Available at www.waterquality.gov.au/anz-guidelines		
AS 3580.9.11 2008	means the Australian Standard AS 3580.9.11 Methods for sampling and analysis of ambient air - Method 9.11: Determination of suspended particulate matter—PM10 beta attenuation monitors		
books	has the same meaning given to that term under the EP Act.		
CEO	means Chief Executive Officer of the department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au		
department; DWER	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.		
means the dust extinction moisture which is the moisture content expressed as a percentage of the product at which the Dust Number is 10 derived from the Australian Standard AS4156.6-2000: Coal preparation, Part 6: Determination of Dust/moisture Relationship Coal, or alternative approved standard as approved by the CEO.			
discharge	has the same meaning given to that term under the EP Act.		
emission	has the same meaning given to that term under the EP Act.		
EP Act	Environmental Protection Act 1986 (WA)		

Term	Definition		
EP Regulations	Environmental Protection Regulations 1987 (WA)		
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.		
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.		
Moisture	means the ratio of the mass of water in a sample to the mass of solids in the sample, expressed as a percentage. In equation form: $w=\frac{m_1-m_2}{m_1}\times 100$		
Content	Where:		
	w = moisture content of sample;		
	m_1 = initial mass, in grams, of the test portion; and		
	m_2 = mass, in grams, of the test portion after drying.		
NATA	means the National Association of Testing Authorities.		
NEPM	means the "National Environment Protection (Assessment of Site Contamination) Measure", as updated from time to time.		
РМ	means particulate matter		
PM ₁₀	Used to described particulate matter that is smaller than 10 microns (µm) in diameter.		
refers to the premises to which this licence applies, as speci front of this licence and as shown on the premises map in Fi Schedule 1 to this licence.			
prescribed premises has the same meaning given to that term under the EP Act.			
Trial	 means a test period during which the licence holder: (a) loads or unloads a new bulk granular material, not specified in Table 6 of this licence, at the premises; or (b) loads or unloads a bulk granular material, specified in Table 6 of the licence, at the premises using a handling method not specified by any other condition of this licence; or (c) loads or unloads a new bulk granular material, not specified in Table 6 of this licence, at the premises using a handling method not specified by any other conditions of this licence, in accordance with Conditions 1 to 8 inclusive. 		

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Term	Definition
Trial commencement date	in relation to the trial of a new granular bulk material means the date which the premises receives the new material on site. In relation to a trial for a new handling method, means the date the new handling method commences.
waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (<u>Figure 1</u>).

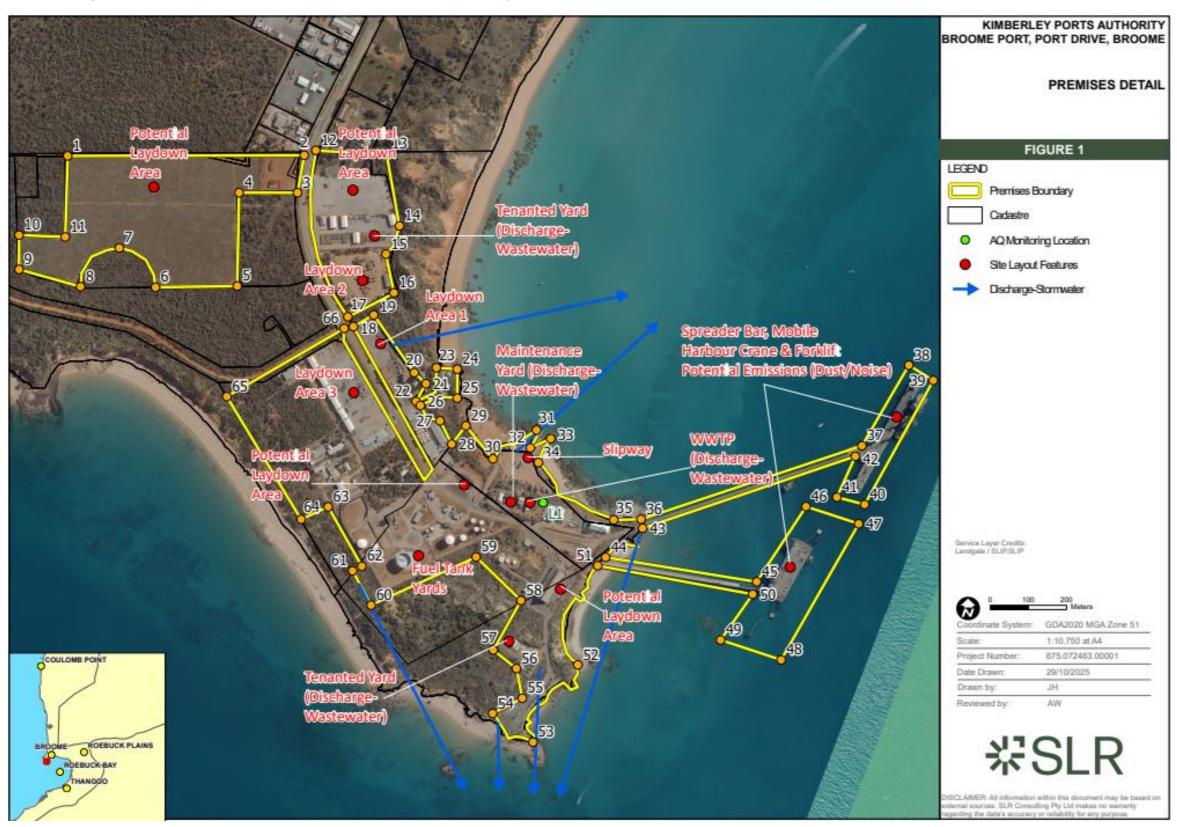


Figure 1: Prescribed premises boundary, key infrastructure and air monitoring location L1

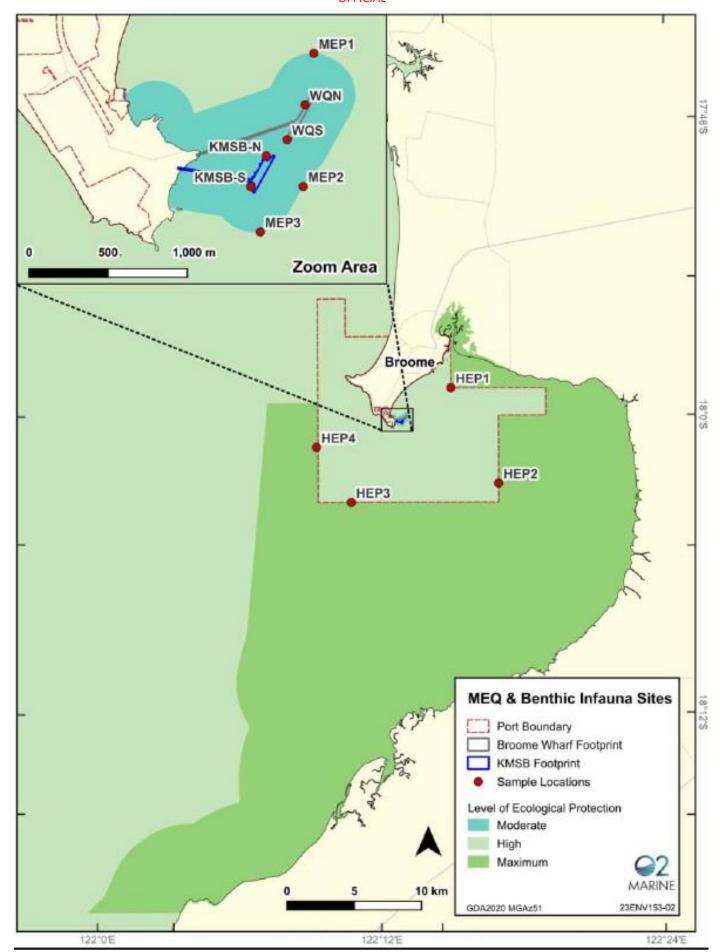


Figure 2 Water quality, sediment quality and benthic infauna sampling locations

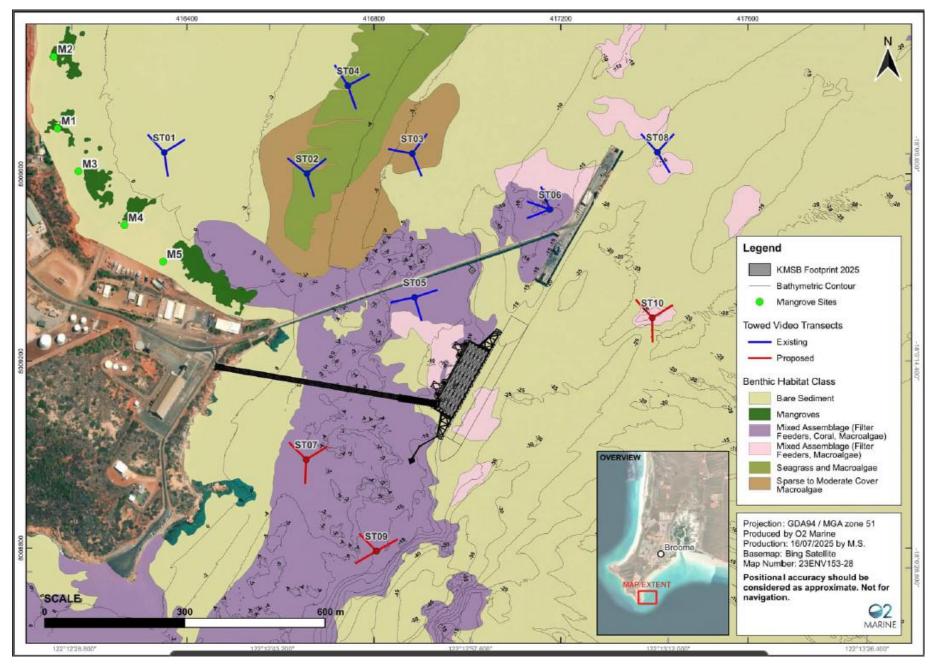


Figure 3 Annual intertidal and five-yearly benthic community habitat sampling locations

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in <u>Table 5</u>.

Table 5 Premises boundary coordinates (GDA2020)

ID	Longitude X	Latitude Y	ID	Longitude X	Latitude Y
1	122.1980182	-17.99442135	34	122.2096456	-18.00174466
2	122.2038786	-17.99443094	35	122.211505	-18.00311048
3	122.2037072	-17.99531874	36	122.2121836	-18.00309972
4	122.2022611	-17.9953128	37	122.217662	-18.0013784
5	122.2022055	-17.99752655	38	122.2188323	-17.99947277
6	122.2001809	-17.99754733	39	122.2194362	-17.99983535
7	122.199287	-17.99661144	40	122.2177213	-18.00277225
8	122.1983239	-17.99752509	41	122.2170348	-18.00259723
9	122.1968035	-17.99711096	42	122.2174973	-18.00162827
10	122.1968072	-17.9962953	43	122.2122203	-18.00331367
11	122.1979486	-17.99634372	44	122.2113001	-18.00399971
12	122.2041684	-17.99431561	45	122.2150408	-18.00459462
13	122.2059185	-17.99439561	46	122.2162704	-18.00281471
14	122.2062305	-17.99611564	47	122.2175725	-18.00322945
15	122.2058926	-17.99678428	48	122.215638	-18.00645017
16	122.2060864	-17.99770271	49	122.2141404	-18.00597163
17	122.2049422	-17.99826608	50	122.2149408	-18.00488995
18	122.2050781	-17.99849969	51	122.2111058	-18.00419609
19	122.2055817	-17.998225	52	122.2106022	-18.00654841
20	122.2065802	-17.99959827	53	122.2094812	-18.00837589
21	122.2068683	-17.99986163	54	122.2084859	-18.00769068
22	122.2066229	-18.00028303	55	122.209224	-18.00733355
23	122.2071288	-17.99948399	56	122.2090798	-18.00662832
24	122.2076462	-17.99952252	57	122.208509	-18.00618755
25	122.2076431	-18.00020709	58	122.2092016	-18.00501599
26	122.206729	-18.00037814	59	122.2080934	-18.00397799
27	122.2072145	-18.00074427	60	122.2054863	-18.00511039
28	122.2075012	-18.00129893	61	122.2050317	-18.00429428
29	122.2078533	-18.0008634	62	122.2052613	-18.00418562
30	122.2085195	-18.00165267	63	122.204433	-18.00277295
31	122.2096034	-18.00097251	64	122.2037608	-18.0030677
32	122.2094493	-18.00139429	65	122.2019349	-18.00014725
33	122.2099526	-18.00117785	66	122.2048496	-17.99854244

Schedule 3: Regulated bulk granular products

Table 6 Regulated bulk granular products

Regulated products	Relevant authorisation date
Mineral sands (including zircon concentrate, Primary zircon and HiTi88 Leucoxene)	6 June 2025