



| | |
|------------------------------------|---|
| Licence number | L9445/2024/1 |
| Licence holder | Kimberley Ports Authority |
| Registered business address | PO Box 46 BROOME WA 6725 |
| DWER file number | INS-0002950 |
| Duration | 06/06/2025 to 05/06/2045 |
| Date of issue | 06/06/2025 |
| 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 June 2025, by:

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 |

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 Table 6, Schedule 3 of this licence, at the premises; or
 - (ii) the loading or unloading of a bulk granular material, specified in Table 6, 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 Table 6, 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

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- (v) any meteorological monitoring to be undertaken; and
- (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
 - (iii) 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

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with Condition 1(h).

5. The licence holder must not Trial the bulk handling of materials that:
- (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 | <ul style="list-style-type: none"> 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 | Meteorological Station | <ul style="list-style-type: none"> Compliant with AS/NZS 3580.14 Capable of monitoring wind speed and direction | Monitoring location L1 as shown on Figure 1 of Schedule 1 |
| 3 | Shiploading infrastructure and vessels, including: <ul style="list-style-type: none"> Mobile harbour crane Rotating containers ("rotainers") used to transport mineral sands from Thunderbird Mine Site | <ul style="list-style-type: none"> 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 must be swept where mineral sand was loaded and transported including, but not limited to, the wharf and the trafficable route in and out of that wharf. 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 42 as shown on Figure 1 of Schedule 1 |
| 4 | Laydown areas 1 and 3 | <ul style="list-style-type: none"> Stormwater within mineral sands laydown areas must be directed to stormwater basins, or equivalent within the laydown area Operations at 'Laydown area 3' are not permitted from: <ul style="list-style-type: none"> 2200 hours to 0700 hours Monday to Saturday; and 2200 hours to 0900 hours Sunday and public holidays | 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/m ³ | 24-hour average | Continuous | AS 3580.9.11 |
| Meteorological station at location L1 | Wind Speed | m/s | 10 minutes | Continuous | AS 3580.14 |
| | Wind direction | degrees | | | |

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

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- (b) Annual intertidal benthic community habitat monitoring at the five (5) intertidal locations within small bay west displayed on Figure 3 that includes a mangrove health assessment;
- (c) Annual subtidal benthic community habitat monitoring at a minimum fifteen (15) random tow video/drop camera locations within the study area displayed in Figure 3 that includes an assessment of benthic community habitat associations and percentage cover of the total study area;
- (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 twelve (12) locations within the study area displayed in Figure 2 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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15. The books specified under condition 14 must:
- be legible;
 - if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - be retained by the licence holder for the duration of the licence; and
 - be available to be produced to an inspector or the CEO as required.

Reporting

16. The licence holder must:
- undertake an audit of their compliance with the conditions of this licence during the preceding annual period, and
 - 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:
- prepare an Environmental Report that provides information in accordance with Table 3 for the preceding annual period, and
 - 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 |
| 11 | <p>Air quality monitoring, including raw monitoring data and detailed analysis. This analysis should include, but is not limited to:</p> <ul style="list-style-type: none"> 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. |
| 12 | <p>Ambient marine monitoring, including tabulated data and detailed analysis including, but not limited to:</p> <ul style="list-style-type: none"> a summary of results; an assessment of any trends in data including assessment of current results as compared to previous reporting periods; and assessment of monitoring results against any targets/limits specified in <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</i> <p>any recommendations for the improvement of the monitoring program and/or modifications for management of mineral sands handling and loading operations to reduce impact.</p> |
| 13 | Complaints summary |

Definitions

In this licence, the terms in Table 4 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. |
| <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</i> | means the current version of the <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</i> 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 <i>Methods for sampling and analysis of ambient air - Method 9.11: Determination of suspended particulate matter—PM10 beta attenuation monitors</i> |
| AS 3580.14 2014 | Means the Australian Standard AS 3580.14 <i>Methods for sampling and analysis of ambient air – Meteorological monitoring for ambient air quality monitoring applications</i> |
| 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 <i>Environmental Protection Act 1986</i> 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. |
| DEM | 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: <i>Coal preparation, Part 6: Determination of Dust/moisture Relationship for Coal</i> , or alternative approved standard as approved by the CEO. |

| Term | Definition |
|---------------------|--|
| 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 | <i>Environmental Protection Act 1986 (WA)</i> |
| EP Regulations | <i>Environmental Protection Regulations 1987 (WA)</i> |
| 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 Content | <p>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:</p> $w = \frac{m_1 - m_2}{m_1} \times 100$ <p>Where:</p> <p>w = moisture content of sample;</p> <p>m₁ = initial mass, in grams, of the test portion; and</p> <p>m₂ = mass, in grams, of the test portion after drying.</p> |
| NATA | means the National Association of Testing Authorities. |
| NEPM | means the “ <i>National Environment Protection (Assessment of Site Contamination) Measure</i> ”, as updated from time to time. |
| PM | means particulate matter |
| PM ₁₀ | Used to described particulate matter that is smaller than 10 microns (µm) in diameter. |
| premises | refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map in Figure 1 in Schedule 1 to this licence. |
| prescribed premises | has the same meaning given to that term under the EP Act. |
| Trial | <p>means a test period during which the licence holder:</p> <p>(a) loads or unloads a new bulk granular material, not specified in Table 6 of this licence, at the premises; or</p> <p>(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</p> <p>(c) loads or unloads a new bulk granular material, not specified in</p> |

| Term | Definition |
|-------------------------|---|
| | 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. |
| 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 (Figure 1).

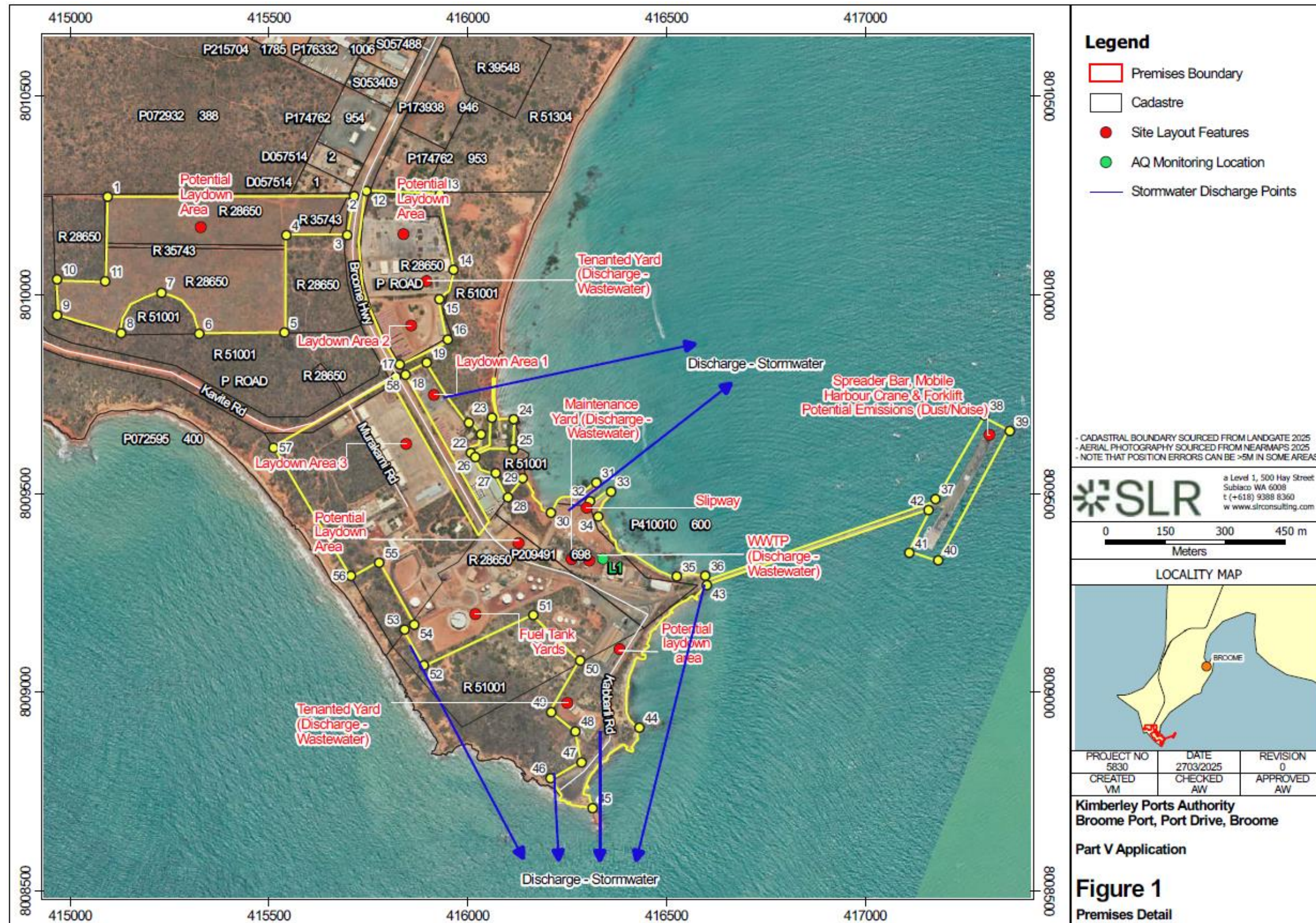


Figure 1: Prescribed premises boundary, key infrastructure and air monitoring location L1

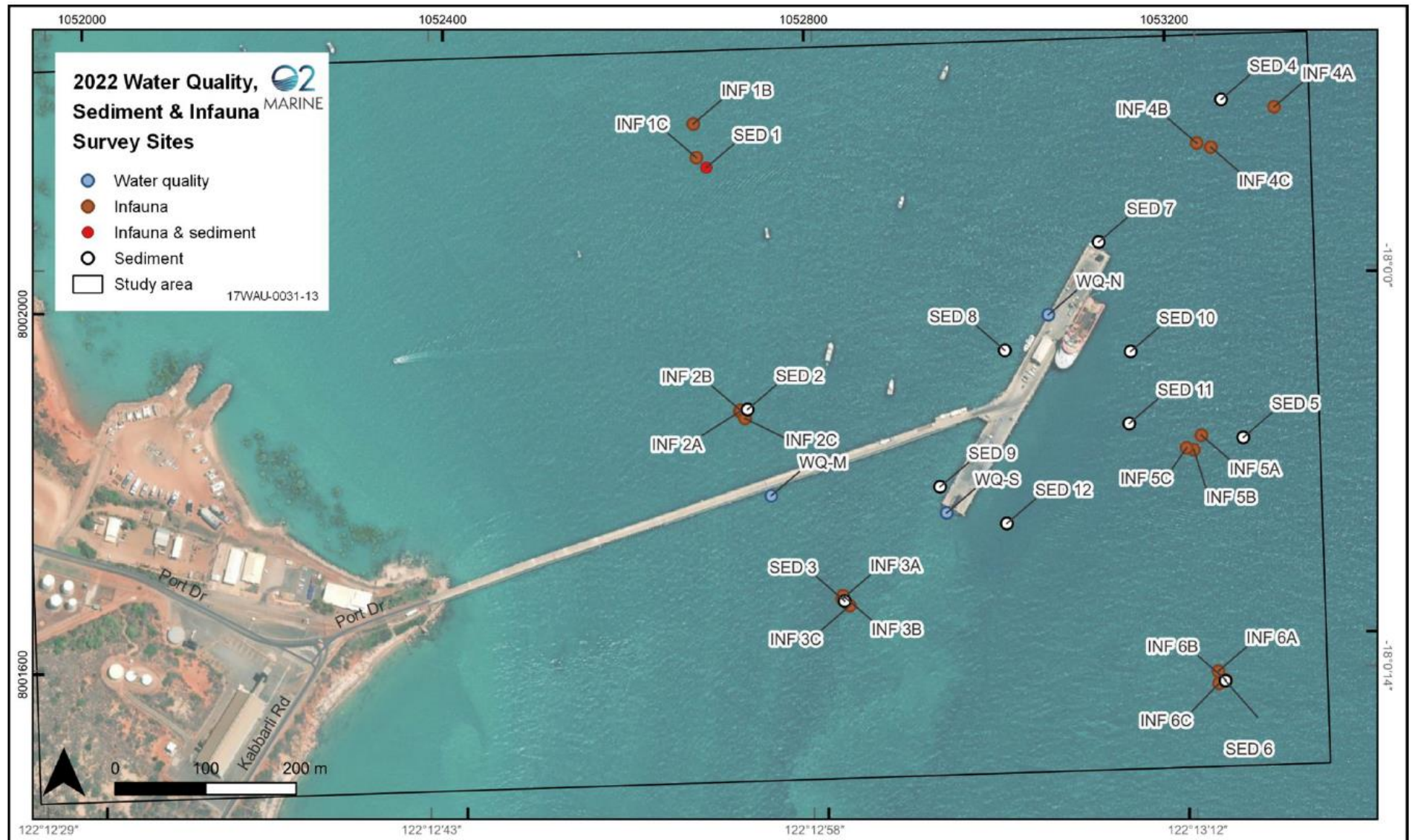


Figure 2 Water quality, sediment quality and benthic infauna sampling locations

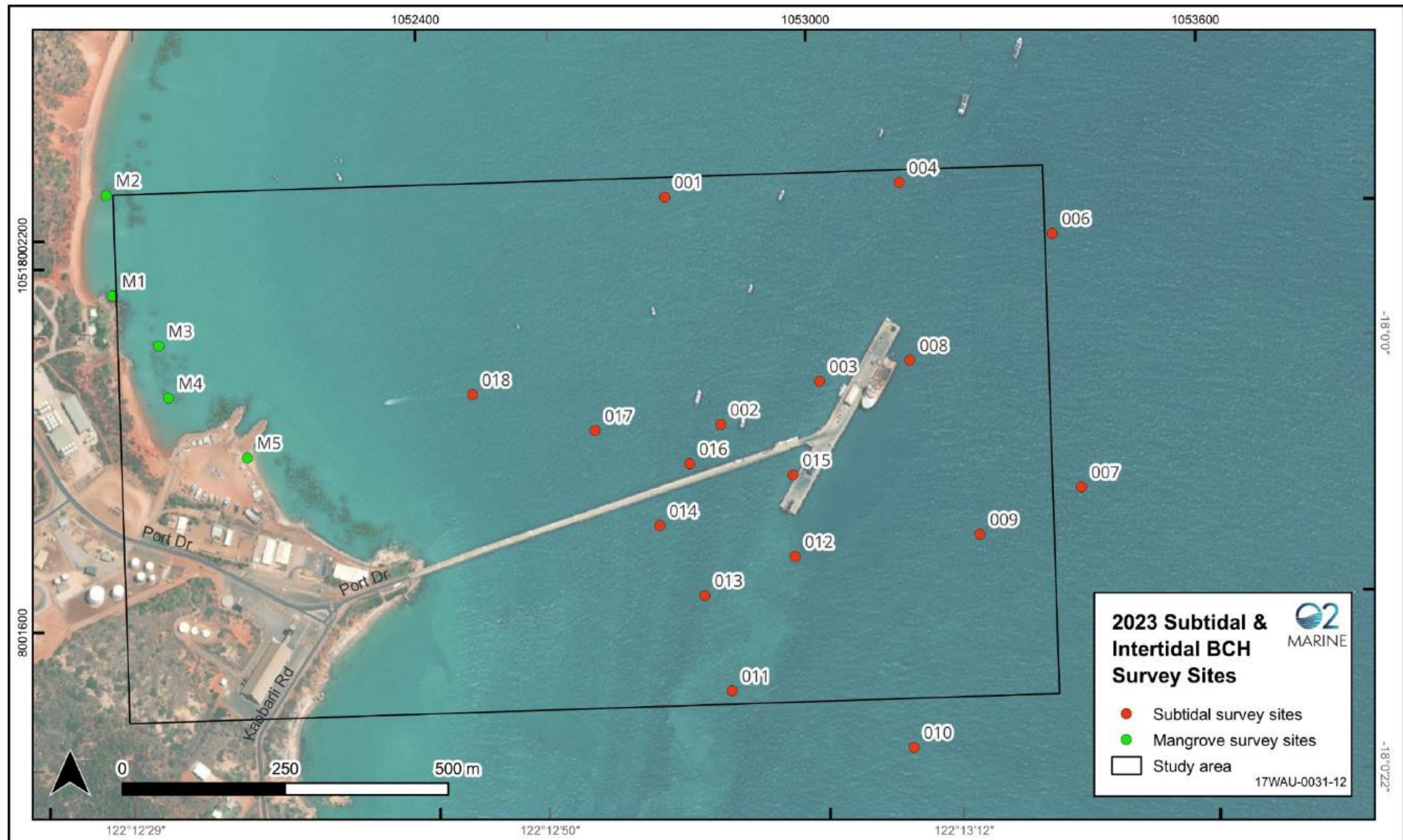


Figure 3 Annual intertidal and five-yearly benthic community habitat sampling locations

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 5.

Table 5 Premises boundary coordinates (GDA2020)

| ID | Longitude | Latitude | ID | Longitude | Latitude |
|----|-----------|----------|----|-----------|----------|
| 1 | 122.198 | -17.9944 | 30 | 122.2085 | -18.0017 |
| 2 | 122.2039 | -17.9944 | 31 | 122.2096 | -18.001 |
| 3 | 122.2037 | -17.9953 | 32 | 122.2094 | -18.0014 |
| 4 | 122.2023 | -17.9953 | 33 | 122.21 | -18.0012 |
| 5 | 122.2022 | -17.9975 | 34 | 122.2096 | -18.0017 |
| 6 | 122.2002 | -17.9975 | 35 | 122.2115 | -18.0031 |
| 7 | 122.1993 | -17.9966 | 36 | 122.2122 | -18.0031 |
| 8 | 122.1983 | -17.9975 | 37 | 122.2177 | -18.0014 |
| 9 | 122.1968 | -17.9971 | 38 | 122.2188 | -17.9995 |
| 10 | 122.1968 | -17.9963 | 39 | 122.2194 | -17.9998 |
| 11 | 122.1979 | -17.9963 | 40 | 122.2177 | -18.0028 |
| 12 | 122.2042 | -17.9943 | 41 | 122.217 | -18.0026 |
| 13 | 122.2059 | -17.9944 | 42 | 122.2175 | -18.0016 |
| 14 | 122.2062 | -17.9961 | 43 | 122.2122 | -18.0033 |
| 15 | 122.2059 | -17.9968 | 44 | 122.2106 | -18.0065 |
| 16 | 122.2061 | -17.9977 | 45 | 122.2095 | -18.0084 |
| 17 | 122.2049 | -17.9983 | 46 | 122.2085 | -18.0077 |
| 18 | 122.2051 | -17.9985 | 47 | 122.2092 | -18.0073 |
| 19 | 122.2056 | -17.9982 | 48 | 122.2091 | -18.0066 |
| 20 | 122.2066 | -17.9996 | 49 | 122.2085 | -18.0062 |
| 21 | 122.2069 | -17.9999 | 50 | 122.2092 | -18.005 |
| 22 | 122.2066 | -18.0003 | 51 | 122.2081 | -18.004 |
| 23 | 122.2071 | -17.9995 | 52 | 122.2055 | -18.0051 |
| 24 | 122.2076 | -17.9995 | 53 | 122.205 | -18.0043 |
| 25 | 122.2076 | -18.0002 | 54 | 122.2053 | -18.0042 |
| 26 | 122.2067 | -18.0004 | 55 | 122.2044 | -18.0028 |
| 27 | 122.2072 | -18.0007 | 56 | 122.2038 | -18.0031 |
| 28 | 122.2075 | -18.0013 | 57 | 122.2019 | -18.0001 |
| 29 | 122.2079 | -18.0009 | 58 | 122.2048 | -17.9985 |

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 |