Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence Number	L4476/1984/12
Licence Holder	Fremantle Port Authority (ABN 78 187 229 472)
Registered business address	1 Cliff Street FREMANTLE, WA, 6160
Duration	10/10/2012 to 09/10/2032
Date of issue	10/10/2012
Amendment date	18/04/2023
Premises details	Kwinana Bulk Terminal Riseley Road, KWINANA BEACH, WA, 6167 CITY OF KWINANA Lot 452 on Plan 220690, Part of Lot 11 on Deposited Plan 39572 and Lot A within Lot 251 and Lot C within Lot 250 on Deposited Plan 415974

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production capacity**
Category 58: Bulk material loading or unloading: premises on which clinker, coal, ore, ore concentrate or any other bulk granular material (other than salt) is loaded onto or unloaded from vessels by an open materials loading system.	Not more than 50 000 tonnes per day (cumulative)
Category 58A: Bulk material loading or unloading: premises on which salt is loaded onto or unloaded from vessels by an open materials loading system.	

This licence is granted to the licence holder, subject to the following conditions, on 18 April 2023 by:

Lauren Edmands
Digitally signed by Lauren Edmands
Date: 2023.04.18 10:25:47 +08'00'

Lauren Edmands
MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

Definitions and interpretation

Definitions

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
Annual Period	means a 12 month period commencing from 1 July until 30 June of the immediately following year.
Approved Policy	has the same meaning given to the term in the EP Act.
AS 1289.2.1.1-2005	means the Australian Standard 1289.2.1.1: Methods of testing soils for engineering purposes - Soil moisture content tests - Determination of the moisture content of a soil - Oven drying method (standard method)
AS 2932.2-2002	means the Australian Standard AS 2932.2-2002 Aluminium ores – Chemical analysis – Determination of the moisture content of bulk material
AS 4156.6-2000	means the Australian Standard AS 4156.6 Coal preparation, Part 6: Determination of Dust/moisture Relationship for Coal.
AS 5621-2013	means the Australian Standard 5621-2013: Iron ores - Rapid moisture determination
Books	has the same meaning given to that term under the EP Act.
Construction or demolition waste	as defined by the *Landfill Waste Classification and Waste Definitions 1996 (as amended April 2018).*
Compliance Report	means a report in a format approved by the CEO as presented by the licence holder or as specified by the CEO (guidelines and templates may be available on the Department's website).
Condition	means a condition to which this licence is subject under s.62 of the EP Act.
Continuous	means a data recovery rate greater than 90% per month.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the *Environmental Protection Act 1986* Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au
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: Coal preparation, Part 6: Determination of Dust/moisture Relationship for Coal, or alternative approved standard as approved by the CEO.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.

Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the licence holder in writing and sent to the licence holder's address for notifications, as described at the front of this licence, in relation to: (a) compliance with the EP Act or this licence; (b) the Books or other sources of information maintained in accordance with this licence; or (c) the Books or other sources of information relating to emissions from the premises.
Discharge	has the same meaning given to that term under the EP Act.
DWER	Department of Water and Environmental Regulation.
Emission	has the same meaning given to that term under the EP Act.
Environmental Harm	has the same meaning given to that term under the EP Act.
EP Act	means the *Environmental Protection Act 1986* (WA).
EP Regulations	means the *Environmental Protection Regulations 1987* (WA).
EQC	means Environmental Quality Criteria
Hazardous waste	as defined by the *Landfill Waste Classification and Waste Definitions 1996 (as amended April 2018).*
Implementation Agreement or Decision	has the same meaning given to that term under the EP Act.
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Licence	refers to this document, which evidences the grant of a licence by the CEO under s.57 of the EP Act, subject to the Conditions.
Licence holder	refers to the occupier of the premises being the person to whom this licence has been granted, as specified at the front of this licence.
Material Environmental Harm	has the same meaning given to that term under the EP Act.
Moisture Content	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: $$\boldsymbol{w = \frac{m_1 - m_2}{m_1} \times 100}$$ 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, Australia

Pollution	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the map in Schedule 1 to this licence.
Prescribed premises	has the same meaning given to that term under the EP Act.
Primary Activities	refers to the prescribed premises activities listed on the front of this licence as described in Schedule 2, at the locations shown in Schedule 1.
Serious Environmental Harm	has the same meaning given to that term under the EP Act.
Suitably qualified engineer	means a person who: (a) holds a Bachelor of Engineering (or equivalent); and (b) has a minimum of at least 3 years of experience working in the area of engineering.
Trial	means a test period during which the licence holder: (a) loads or unloads a new bulk granular material, not specified in Table 8 Schedule 2 of this licence, at the premises; or (b) loads or unloads a bulk granular material, specified in Table 8 Schedule 2 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 8 Schedule 2 of this licence, at the premises using a handling method not specified by any other conditions of this licence, in accordance with Conditions 2 to 9 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.
Unreasonable Emission	has the same meaning given to that term under the EP Act.
Waste	has the same meaning given to that term under the EP Act.

Interpretation

In this licence:

(a) the words ‘including’, ‘includes’ and ‘include’ will be read as if followed by the words ‘without limitation’;

(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.

(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.

Conditions

Emissions

1. The licence holder must not cause any emissions from the Primary Activities on the premises except for specified emissions and general emissions described in Column 1 of Table 2 subject to the exclusions, limitations or requirements specified in Column 2 of Table 2.

Table 2: Emissions Table

Column 1	**Column 2**
Emission Type	**Exclusions/Limitations/Requirements**
Specified Emissions	
Fugitive dust	Subject to compliance with: • rows 1 to 6 of Table 9 in Schedule 3; and • Conditions 10 to 17.
Washwater discharges and spills to the marine environment	Subject to compliance with: • rows 7 to 9 of Table 9 in Schedule 3; and • Conditions 10, 11, 18 and 19.
Stormwater discharges	Subject to compliance with: • row 10 of Table 9 in Schedule 3; and • Conditions 10 and 11.
General Emissions (excluding Specified Emissions)	
Emissions which arise from the Primary Activities set out in Schedule 2.	Emissions excluded from General emissions are: • Unreasonable emissions; or • emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or • discharges of Waste in circumstances likely to cause Pollution; or • emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or • emissions or discharges which do not comply with an Approved Policy;

Column 1	Column 2
Emission Type	**Exclusions/Limitations/Requirements**
	or • emissions or discharges which do not comply with a prescribed standard; or • emissions or discharges which do not comply with the conditions in an Implementation Agreement or Decision; or • emissions or discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the Environmental *Protection (Unauthorised Discharges) Regulations 2004*.

Trial conditions

Notification of a Trial

2. 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 8 Schedule 2 of this licence, at the premises; or

(ii) the loading or unloading of a bulk granular material, specified in Table 8 Schedule 2 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 8 Schedule 2 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

(h) only when a CEO notification to cease a Trial has been issued in accordance with Condition 3, 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 2((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)

3. 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 2, 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 2, 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 2(h).

Trial Restrictions

4. 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.

5. 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) (d) immediately upon receipt of a CEO notification to cease a Trial in accordance with Condition 3,

whichever occurs first.

A Trial may only recommence upon notification of a Trial amendment, in accordance with Condition 2(h).

6. 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

7. The licence holder must submit a report to the CEO which includes the results of monitoring required by Condition 2(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.

8. 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 7.

Ongoing shipments and handling

9. 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 7, at least three months prior to the completion of the Trial period.

Infrastructure and equipment

10. The licence holder must ensure that the infrastructure and equipment specified in column 1 of Table 9 in Schedule 3, are maintained and operated in accordance with the requirements specified in column 2 of Table 9 in Schedule 3.

11. The licence holder must ensure that the infrastructure and equipment in Schedule 3 are maintained in good working order.

Product specifications

12. The licence holder must ensure that at least 90% of spodumene and 95% of bauxite accepted at the premises contains a Moisture Content at or above the Dust Extinction Moisture (DEM) level derived from application of AS4156.6-2000.

13. The licence holder must ensure that the Moisture Content of spodumene and bauxite, as averaged over each ship, remains at or above the DEM level for at least 90% of shipments for each product.

14. For the purposes of Conditions 12 and 13, a representative sample for Moisture Content is determined in accordance with Table 3 below.

Table 3: Spodumene and bauxite – representative sampling methodology

Column 1	**Column 2**	**Column 3**	**Column 4**
Location	**Parameter**	**Frequency/ Averaging Period**	**Method**
Mine Site (spodumene) Refinery (bauxite)	Moisture Content	Weekly (average calculated from daily samples)	AS 1289.2.1.1-2005 or AS 5621-2013 undertaken by laboratory with technical results in a written report.
Premises	Moisture Content	Per shipment (average calculated from samples collected approximately every 1,000 tonnes loaded)	AS 1289.2.1.1-2005; AS2932.2-2002; or AS 5621-2013, with technical results in a written report.

15. The licence holder must, upon Department Request, sample the spodumene and/or bauxite and undertake Moisture Content analysis in accordance with a method defined in Table 3, with results supplied to CEO to confirm compliance with Condition 13.

Dust monitoring and reporting

16. The licence holder must monitor the emissions specified in column 1 from the locations specified in column 2 in Table 4. Emissions must be calculated as an average over the period specified in column 3, at the frequency specified in column 5, and in accordance with the method specified in column 6 in Table 4.

Table 4: Dust Emissions Monitoring

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Emission	**Location**	**Averaging Period**	**Reportable Event Criteria**	**Frequency**	**Method**
Total Suspended Particulates (ug/m^3)	KBB1, East, Griffin and T8 as per the monitoring locations on Dust Monitoring map in Schedule 4	24 hour average	≥260µg/m^3	Continuous	Real-time aerosol monitoring or equivalent as approved by the CEO

17. The licence holder must provide a report to the CEO specifying the data from the monitoring undertaken in Condition 16 at the frequency and containing the information specified in Schedule 4.

Cockburn Sound monitoring and reporting

18. The licence holder must monitor the parameters specified in column 1 from the locations specified in column 2 in Table 5. Monitoring results to be reported for the period specified in column 3 and in accordance with the methods specified in columns 4 and 5 in Table 5.

Table 5: Cockburn Sound Monitoring

Column 1	Column 2	Column 3	Column 4	Column 5
Parameter	**Location**	**Period**	**Sample**	**Method**
Water Quality: **Physico-chemical:** Temp; salinity, pH, Dissolved Oxygen (DO) **Carbon, Nutrients and Total Suspended Solids (TSS):** Total Nitrogen, Nitrate (NO3), Ammonium (NH4), total phosphorus and ortho-Phosphorus, dissolved organic carbon (DOC), TSS.	KBT1, KBT2, KBT3 as per the monitoring locations on Marine Monitoring map in Schedule 4	Annually: Sample on a single occasion annually in January/ February/March Report by 30th September in any year	Probe logging of physico-chemical parameters. Grab samples for balance of analytes. Single sample for nutrients from surface of water and seabed. Single sample for biological response and organics from surface of water.	Physico-chemical profiles to be obtained using a multiparameter probe across entire depth of the water column. As required, water quality samples are to be collected from the surface (0.5m below sea level) and the bottom (0.5m above seabed). The samples are to be processed and measured at a NATA accredited laboratory(s).

Column 1	Column 2	Column 3	Column 4	Column 5
Parameter	**Location**	**Period**	**Sample**	**Method**
Biological Response: chlorophyll-a, chlorophyll-b, chlorophyll-c and phaeophytin; **Organics:** Total Petroleum Hydrocarbon (TPH) and **(**benzene, toluene, ethylbenzene and xylenes (BTEX).	KBT1, KBT2, KBT3 as per the monitoring locations on Marine Monitoring map in Schedule 4	Annually: Sample on a single occasion annually in January/ February/March Report by 30th September in any year	Probe logging of physico-chemical parameters. Grab samples for balance of analytes. Single sample for nutrients from surface of water and seabed. Single sample for biological response and organics from surface of water.	Physico-chemical profiles to be obtained using a multiparameter probe across entire depth of the water column. As required, water quality samples are to be collected from the surface (0.5m below sea level) and the bottom (0.5m above seabed). The samples are to be processed and measured at a NATA accredited laboratory(s).
Mussels Arsenic, cadmium, chromium, copper, lead, mercury, selenium and zinc	From wharf or sentinel mussels	Annually: Sample on a single occasion annually in January/February/March	Single grab harvesting of or from sentinel mussels.	To be collected from the nearest available surface (wharf pylons) or from sentinel mussel cage. Immediately after sampling, stored on ice and dispatched to NATA accredited laboratory(s) for processing and analysis.
Sediment Quality for metals Arsenic, cadmium, chromium, copper, lead, manganese, mercury, selenium and zinc	KBT1, KBT2, KBT3 as per the monitoring location map on the Marine Monitoring map in Schedule 4	Annually: Sample on a single occasion annually in January/February/March	Annual grab sample of sediment	As per section 6.4 of the *Manual of Standard Operating Procedures for Environmental Monitoring against the Cockburn Sound Environmental Quality Criteria (2003-2004)*

19. The licence holder must provide a report to the CEO specifying the data from the monitoring undertaken in Condition 18 at the frequency specified in Schedule 4.

Information

20. 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) the maintenance of infrastructure required to ensure that it is kept in good working order in accordance with Conditions 10 and 11 of this licence;

(c) Reportable Events reported in accordance with Condition 16 and Schedule 4 of this licence.

(d) the Moisture Content for all bauxite and spodumene sampled at the refinery/mine site and received at the premises on a weekly basis; and

(e) documentation of the DEM level for all bulk bauxite and spodumene as required by Condition 10; and

(f) documentation of the proportion respirable silica quartz for all bulk bauxite and spodumene as determined annually by a laboratory and representative of the bulk granular material accepted at the premises at all times.

21. In addition, the Books must:

(a) be legible;

(b) if amended, be amended in such a way that the original and subsequent amendments remain legible and are capable of retrieval;

(c) be retained for at least 3 years from the date the Books were made; and

be available to be produced to an Inspector or the CEO.

22. If an Emission the type referred under Condition 1 occurs on the premises, then the licence holder must:

(a) investigate why the Emission occurred;

(b) take all reasonable steps to prevent the Emission occurring again;

(c) record the details of the investigation and all steps taken; and

(d) provide a copy of the record to the CEO within 21 days of the date licence holder became aware Emission occurred.

23. The licence holder must record the number and details of any complaints received by the licence holder relating to the premises, and any action taken by the licence holder in response to the complaint. Details of complaints must include:

(a) an accurate record of the concerns or issues raised, for example a copy of any written complaint or a written note of any verbal complaints made;

(b) the name and contact details of the complainant, if provided by the complainant;

(c) the date of the complaint; and

(d) the details and dates of the actions taken by the licence holder in response to the complaints.

24. 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 by no later than 60 days after the end of that annual period an Annual Audit Compliance Report in the approved form;

25. The licence holder must comply with a Department Request, within 7 days from the date of the Department Request or such other period specified in the Department Request.

Construction Conditions

26. The licence holder must:

(a) install the infrastructure;

(b) in accordance with the corresponding installation requirements; and

(c) at the corresponding infrastructure location

as set out in Table 6.

Table 6: Design and installation requirements

	Infrastructure	Design and installation requirements	Infrastructure location
1.	IC04 Conveyor	a) Fitted with top wind shields or conveyor covers; b) Sweeper trucks to remove dust, spilt and accumulated material from all trafficable areas; and c) Water cart onsite and operational to wet all visible dust lift off.	As shown as “IC04” in Figure 4.
2.	IC05 Conveyor	a) Fitted with top wind shields or conveyor covers; b) Sweeper trucks to remove dust, spilt and accumulated material from all trafficable areas; and c) Water cart onsite and operational to wet all visible dust lift off.	As shown as “IC05” in Figure 4.
3.	IC06 Conveyor	a) Fitted with top wind shields or conveyor covers; b) Sweeper trucks to remove dust, spilt and accumulated material from all trafficable areas; and c) Water cart onsite and operational to wet all visible dust lift off.	As shown as “IC06” in Figure 4.
4.	IC06/RC02 Conveyor Transfer chute	a) Transfer chute to be fully enclosed; b) Sweeper trucks to remove dust, spilt and accumulated material from all trafficable areas; and c) Water cart onsite and operational to wet all visible dust lift off.	Located between conveyor “IC06” and “RC02” in Figure 4.

27. The licence holder must within 60 days of an item of infrastructure required by condition 26 being installed:

(a) undertake an audit of their compliance with the requirements of condition 26; and

(b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.

28. The Environmental Compliance Report required by condition 27, must include as a minimum the following:

(a) certification by a suitably qualified engineer that the items of infrastructure or component(s) thereof, as specified in condition 26, have been constructed in accordance with the relevant requirements specified in condition;

(b) as constructed plans and detailed site plan for each item of infrastructure or component of infrastructure specified in condition 26; and

(c) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

Schedule 1: Maps

Premises Map

The premises are shown in the map below. The purple line depicts the boundary to the premises.

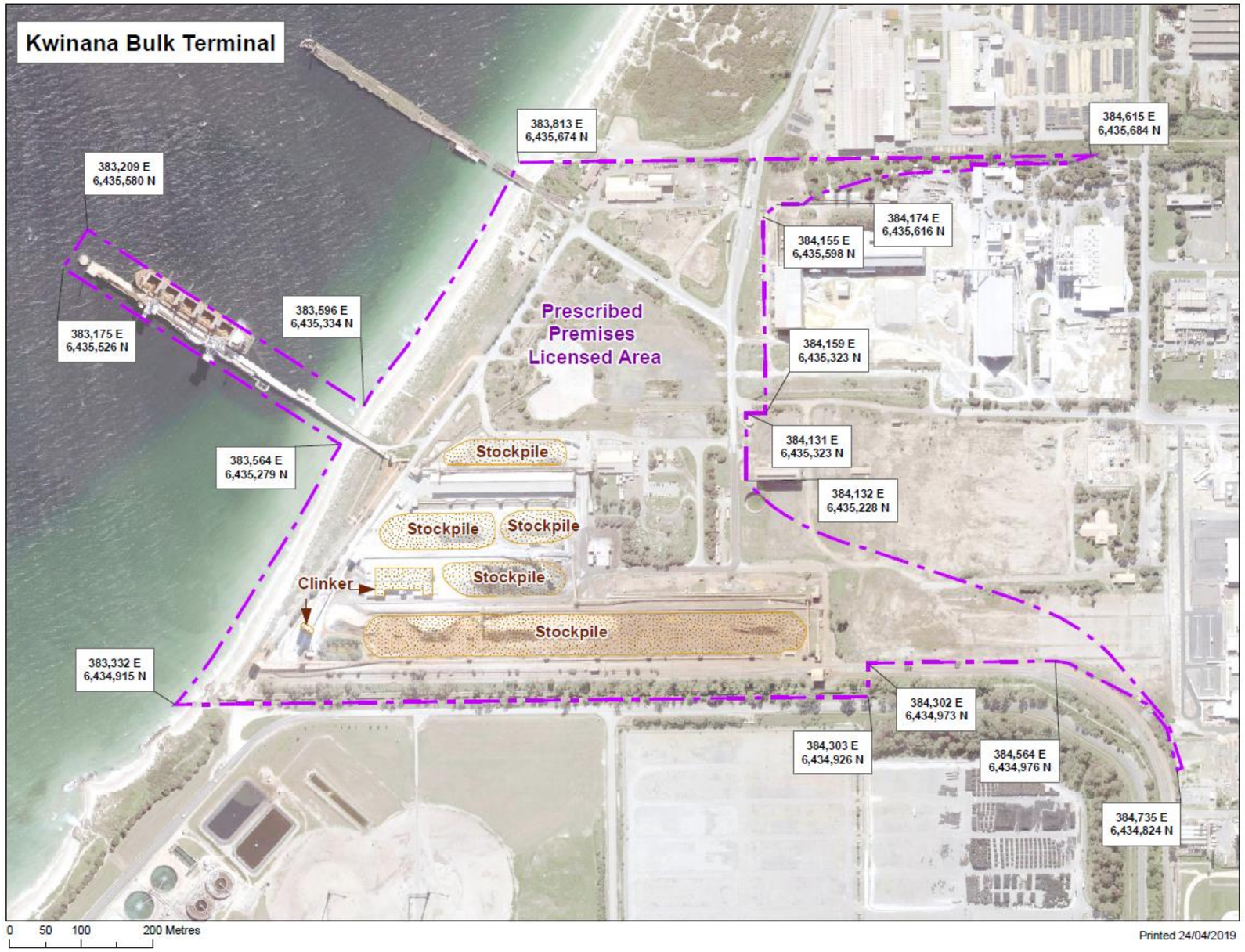

Figure 1: Prescribed premises boundary

Building Identification Plan

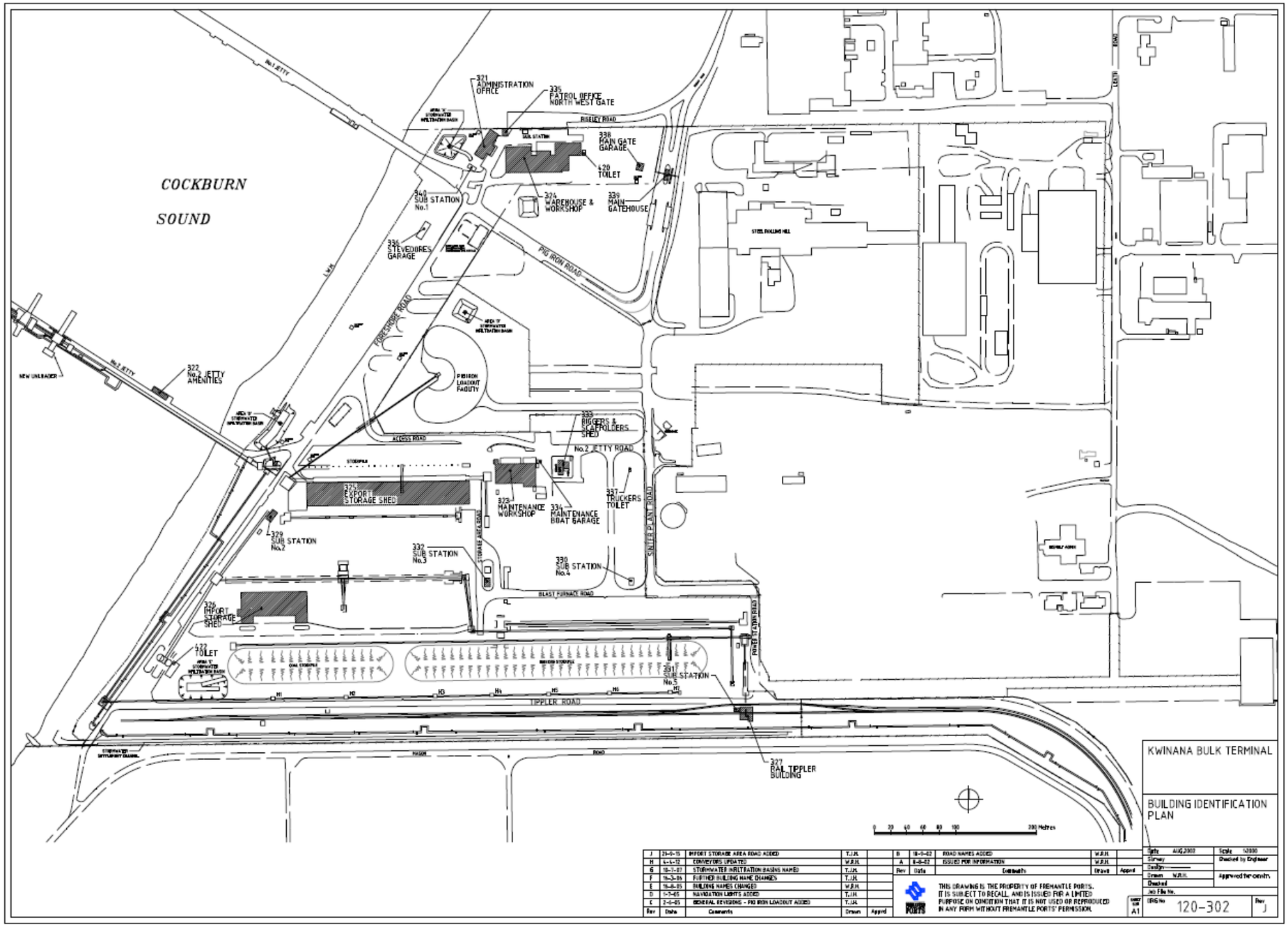

Figure 2: Location of buildings within prescribed premises

Conveyor Identification Plan

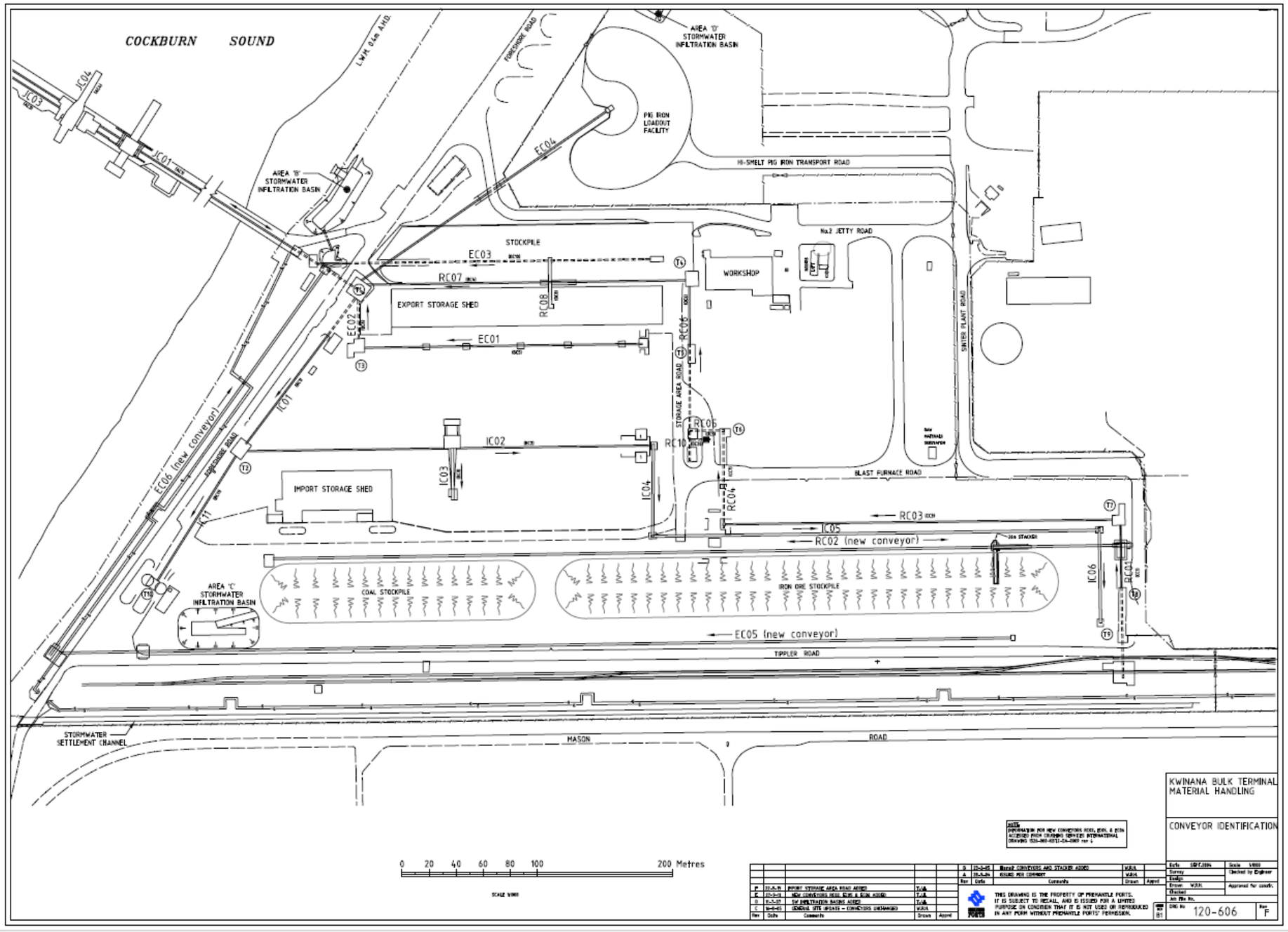

Figure 3: Labelled conveyors

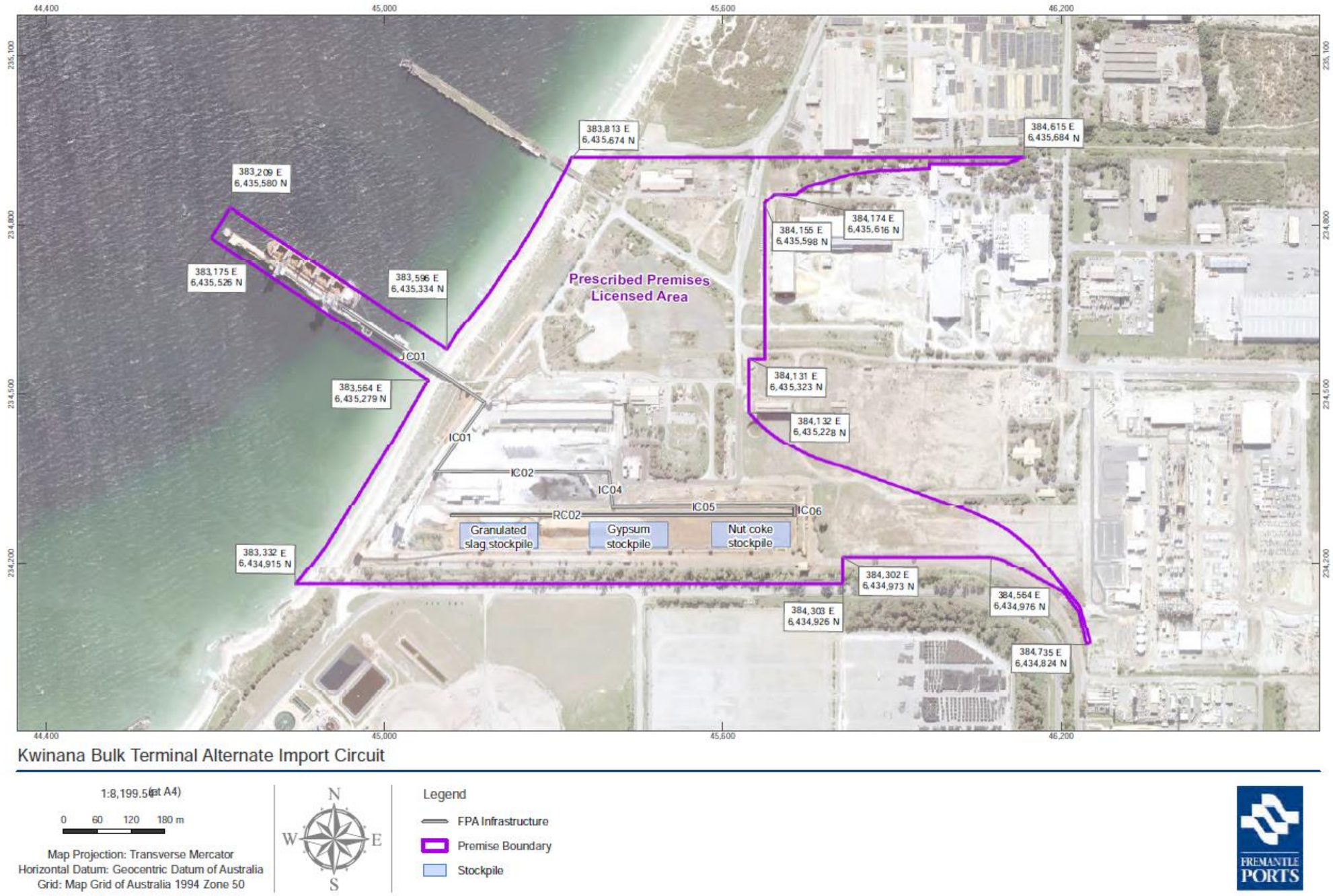

Figure 4: Proposed alternative import circuit and proposed new location for granulated slag, gypsum and nut coke stockpiles.

Schedule 2: General Description

At the time of assessment, the following activities and operations were considered in the determination of the risk and related Conditions for the premises.

The licence holder is carrying out activities at the premises which fall within the meaning of prescribed premises under the EP Act. The premises constitutes a Category 58 and 58A premises on which bulk granular material is loaded onto or unloaded from vessels by an open materials loading system.

Infrastructure and equipment

KBT infrastructure, as it relates to Category 58 and 58A activities, is detailed in Table 7with reference to the premises Map, Building Identification Plan and Conveyor Identification Plan.

Table 7: KBT Category 58 and 58A infrastructure

	Infrastructure	Plan reference
1.	Import storage shed	Building Identification Plan (See Figure 2)
2.	Export storage shed	Building Identification Plan (See Figure 2)
3.	Clinker (bulk material) storage silos	Premises Map (See Figure 1)
4.	Rail Tippler facilities – narrow and standard gauge	Building Identification Plan (See Figure 2)
5.	Single jetty (KBB2 or No.2 Jetty)	Building Identification Plan (See Figure 2)
6.	Loader with a loading rate of up to 2,000 tonnes per hour (t/h)	Conveyor Identification Plan (See Figure 3)
7.	Grab unloader with a discharge rate of 700 – 800 t/h with baghouse	Conveyor Identification Plan (See Figure 3)
8.	Hopper systems	Conveyor Identification Plan (See Figure 3): EC05 (Hoppers H1 to H7) and EC04 Hopper
9.	Conveyor systems for imports from the transfer point on KBB2 to the land based stockpiling or storage facilities.	Conveyor Identification Plan (See Figure 3): T1, IC01, T2 and IC11 (to Bulk Storage Silos); or T1, IC01, T2, IC02 and IC03 (to import sheds) Proposed Alternate Import Circuit (See Figure 4): (T1, IC01, T2, IC02, IC04, IC05, IC06 and RC02 (to stockpiles)
10.	Conveyor system for exports from rail tippler facilities to KBB2.	Conveyor Identification Plan (See Figure 3): RC01, RC02 (to stockpiles) EC05 and EC06 (to KBB2 conveyor) JC01, JC03 and JC04 conveyors

	Infrastructure	Plan reference
11.	Conveyor System for exports from truck receivals to KBB2	Conveyor Identification Plan (See Figure 3): EC03 (to AL04 shiploader), EC04
12.	Stockpile storage areas	Premises Map (See Figure 1 and Figure 4)
13.	Stormwater Infiltration Basins	Building Identification Plan (See Figure 2)

Site layout

The infrastructure and equipment are set out on the premises in accordance with the site layout specified on the plans in Schedule 1.

Operating arrangements

The licence holder is responsible for all operations and facilities onsite at KBT including all material handling systems, stockpile management and rail line management.

Bulk Materials loaded and unloaded

The conveyor system delivers bulk product to and from KBB2 with imported material being transferred off site by trucks. The berth loader and conveying system has a maximum loading rate of 2000 tonnes per hour. KBB2 is available for 24 hours a day, seven days a week.

Bulk products currently handled through KBT include bauxite, cement clinker, iron ore, gypsum, granulated slag, nut coke, silica sands and spodumene.

The licence holder operates ship unloading/loading and materials loading system for the following materials:

Table 8: Bulk Material tonnages assessed

Commodity	Volume
Iron ore	5,000,000 tonnes (exported)
Bauxite	
Cement clinker	1,400,000 tonnes (imported)
Gypsum, granulated slag, nut coke (combined)	550,000 tonnes (exported and imported)
Spodumene	400,000 tonnes (exported)
Silica sands	2,600,000 (exported)
Total tonnage (aggregate of all bulk materials including Trial products)	**9,950,000 tonnes**

Schedule 3: Infrastructure and Equipment

Table 9: Infrastructure and equipment controls table

	Column 1	Column 2
	Infrastructure	**Requirements**
Dust Management		
1	Wind shields and sprinklers where located on conveyors RC01, RC02 (material stockpiles), EC05 and EC06 (to KBB2 conveyor) JC01 identified on the Conveyor Identification Plan in Schedule 1. Wind shields on IC01, IC04, IC05, IC06 and IC11. EC03 to be operated as an underground conveyor. EC04 conveyor is not fitted with wind shields or sprinklers.	To contain dust or suppress dust generation on the conveyor and conveyor belt transfer points. Ensure conveyor sprinklers are operating whenever visible dust is generated from use (except when conveying cement clinkers). Dust associated with EC04 to be managed by nearby stockpile sprinklers.
2	Shielded rail tippler system 327 with water sprays identified on the Building Identification Plan in Schedule 1.	Sprinkler system designed and maintained to suppress dust generation. Ensure tippler sprinklers are operating whenever visible dust is observed during train unloading.
3	Dust extraction unit on T1 and T2 transfer stations and bulk material silo, and loader/unloader AL05 identified on the Conveyor Identification Plan in Schedule 1.	All dust collectors must be on, operating and not full or blocked. AL05 must ensure baffles for AL05 are in place during dusty cargo operations.
4	Sprinklers on southern side of stockpiles identified on the KBT premises Map in Schedule 1.	Sprinklers to provide majority of stockyard coverage for dust suppression. Sprinklers to be turned on at first signs of visible dust lift-off and operated until material and/or ground surface is sufficiently conditioned to prevent dust lift off.
5	Truck mounted water cannon on areas not covered by sprinkler system.	Water truck with cannon utilised at first signs of visible dust lift-off from the stockyard not suppressed by the fixed sprinkler system to augment sprinkler systems.
6	Import and Export Storage sheds 325 and 326 identified on the Building Identification Plan in Schedule 1.	Ensure Import Storage Shed is loaded through the roof one door at a time, keeping other roof doors closed. Ensure Export Storage shed only has one door open at a time.
Spill Management		
7	Hoppers adjacent top EC05 conveyor.	Loading into hoppers which are designed to prevent spillage.
8	Spill plate on loader/unloader AL05.	Spill plate to capture ship to shore cargo grab spillage.
9	Chute on IC03 stacker identified on the Conveyor Identification Plan in Schedule 1.	Chute to be in place during unloading of clinker into the clinker shed.

	Column 1	Column 2
	Infrastructure	**Requirements**
Wash water and stormwater management		
10	Area ‘A’, ‘C’ and ‘D’ Stormwater Infiltration Basins identified on the Conveyor Identification Plan in Schedule 1.	All site stormwater to drain to three unlined infiltration basins. No stormwater drained directly to Cockburn Sound.

Schedule 4: Monitoring

Monitoring locations

See the following marine monitoring and dust monitoring location maps.

Reporting frequency

Reports to be submitted to the CEO annually by the last day of September in any year.

Cockburn Sound monitoring reports

The monitoring reports must contain:

- the sampling or measurement date;
- the raw monitoring data for the sampling event in tabulated form with reference to the applicable EQC;
- time series graphical plots of the data if EQC are exceeded;
- met ocean data for the day(s) of sampling;
- activities being undertaken at KBT 24 hours prior to and at the time of sampling/measurement.

Dust monitoring reports

The monitoring report must contain:

- raw monitoring data in tabulated form;
- monthly data recovery rates;
- incidence of Reportable Events, including the following information for the date(s) where Reportable Events occur:
    - Reportable Event date(s);
    - 15-minute averaged TSP monitoring data for all monitoring locations presented graphically;
    - 15-minute averaged meteorological data (wind direction and speed) presented graphically;
    - a description of bulk granular material handling activities undertaken at the premises in the 24 hour period during each Reportable Event;
    - a description of potential sources of high dust levels;
- Where the licence holder has identified that Primary Activities may have contributed to the Reportable Event also include the following information:
    - the Moisture Content of bauxite and/or spodumene received at the time of the exceedance against DEM;
    - any actions taken by site personnel to reduce fugitive dust.

Marine Monitoring Location Map

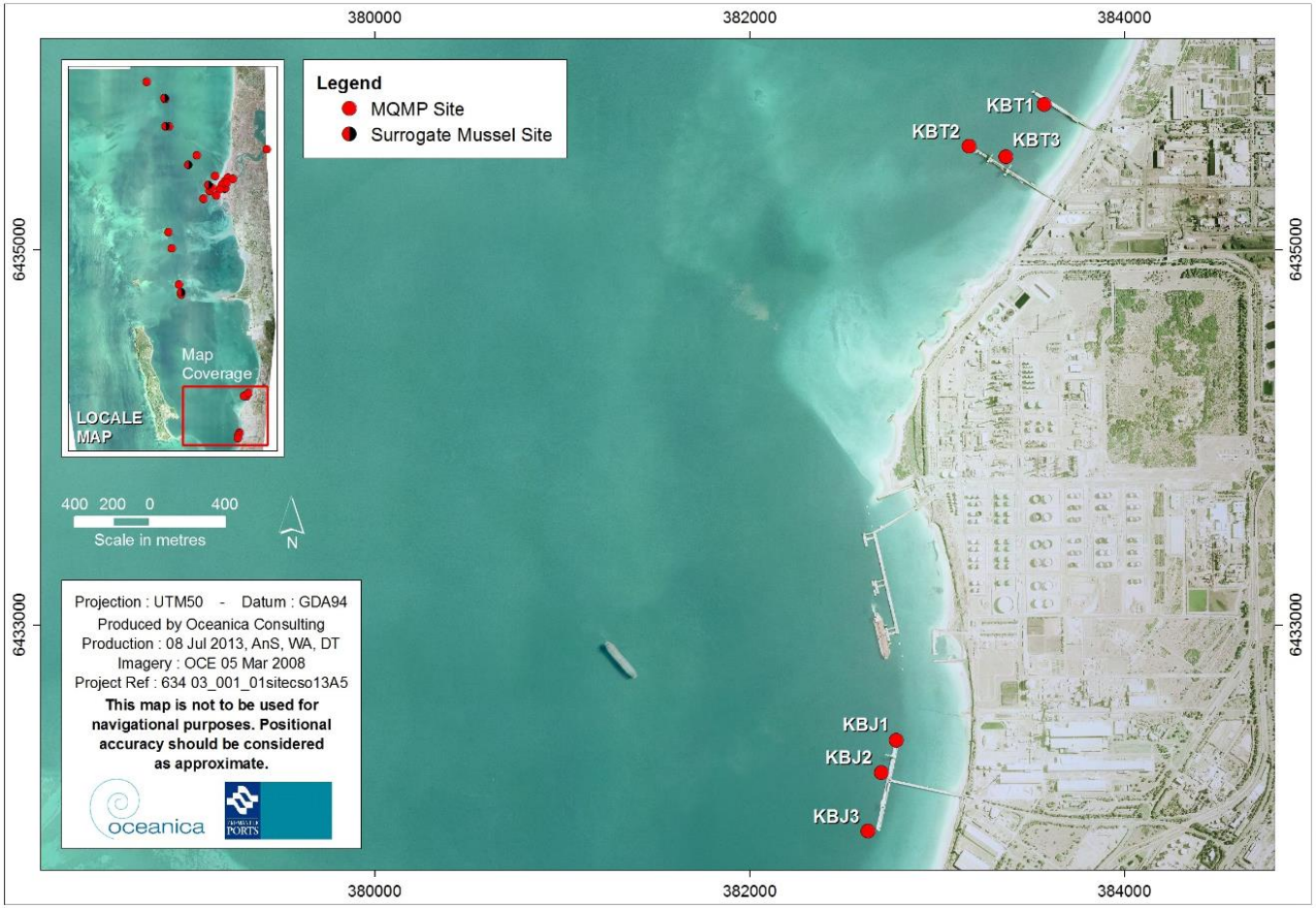

Figure 5: Monitoring locations for marine monitoring

Dust Monitoring Location Map

Figure 6: Monitoring locations for dust monitoring