Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L4275/1982/15
Licence holder	Mid-West Ports Authority
Registered business address	298 Marine Terrace GERALDTON WA 6530
DWER file number	2011/000451-4
Duration	18/03/2015 to 11/03/2035
Date of issue	12/03/2015
Date of amendment	18/11/2024
Premises details	Geraldton Port GERALDTON WA 6530 Legal description – Part of Lot 502 on Deposited Plan 57801 As defined by the Premises map in Schedule 1.

Prescribed premises category description (Schedule 1, ***Environmental Protection Regulations 1987***)	**Assessed production / design 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.	160,000 tonnes per day (cumulative); and 23,000,000 tonnes per annual period (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 amended licence is granted to the licence holder, subject to the attached conditions, on 18 November 2024, by:

Christine Pustkuchen
Digitally signed by Christine Pustkuchen
Date: 2024.11.18 09:56:15 +08'00'

MANAGER, RESOURCE INDUSTRIES
INDUSTRY REGULATION (STATEWIDE DELIVERY)
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
18/03/2008	L4275/1982/13	Licence re-issue.
09/02/2011	L4275/1982/13	Licence amendment: change of copper air quality target.
08/09/2011	L4275/1982/13	Licence amendment: change of lead air quality limit.
13/03/2012	L4275/1982/14	Licence re-issue.
03/01/2013	L4275/1982/14	Licence amendment: trial nickel exports.
14/02/2014	L4275/1982/14	Licence amendment for new cargo: nickel.
12/03/2015	L4275/1982/15	Licence re-issue and REFIRE conversion.
15/08/2018	L4275/1982/15	Amendment Notice 1: authorised to handle up to 300,000 tonnes per year of manganese ore out of Berth 6.
21/01/2019	L4275/1982/15	Amendment Notice 2: to allow for Trial conditions to apply evaporites including gypsum, salt, and potash under Category 58A.
03/03/2020	L4275/1982/15	DWER-initiated amendment to amalgamate Amendment Notices 1 and 2 in the Licence. During amalgamation process, no risk assessment of the Premises was undertaken.
21/03/2021	L4275/1982/15	Amendment updating daily tonnage throughput to reflect current operations. Addition of mineral sands concentrate, clean fills, and fertiliser as authorised bulk products to handling.
19/09/2021	L4275/1982/15	Amendment to authorise handling of iron concentrate at Berth 6.
23/01/2024	L4275/1982/15	Amendment for the inclusion of lithium direct shipping ore (DSO) and spodumene concentrate for authorised handling and export from Berth 4.
18/11/2024	L4275/1982/15	Amendment to increase Category 58 and 58A production capacity to 23,000,000 tonnes per annual period, and changes to emission points and monitoring locations.

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:

Premises operation

1. The licence holder must operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.

2. The licence holder must:

(a) implement all practical measures to prevent stormwater runoff becoming contaminated by the activities on the premises; and

(b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the premises.

3. The licence holder must ensure that dust extraction systems are in operation at truck and rail unloader facilities for regulated bulk granular as well as storage sheds for iron ore and metal concentrates products, as shown in Schedule 1: Maps, Figure 2, whenever dust-generating activities (including stockpile disturbance) are being undertaken.

4. The licence holder must:

(a) prior to the loading and unloading of regulated bulk granular products, determine and ensure that the bulk granular products are adequately moisture conditioned by product owner, such that the moisture content is at or above the associated DEM level for the bulk granular product, as determined by AS 4156.6;

(b) maintain accurate records of the moisture content of each regulated bulk granular product shipment, excluding mineral sands, garnet, clean fill, and fertiliser, as well as the associated DEM level for these regulated bulk granular products; and

(c) where adequate moisture conditioning cannot be practically achieved for a regulated bulk granular product, implement all practical measures to prevent excessive dust emissions during loading and unloading of these regulated bulk granular products.

5. The licence holder must, during the loading and unloading of regulated bulk granular products:

(a) utilise and maintain dust covers and/or wind shields on conveyors;

(b) position the shiploader such that vertical drop heights into the vessel's hold are minimised as much as practicable;

(c) ensure storage shed doors are closed, where practical, during shiploading (excluding operation of external feed hopper facility);

(d) utilise and maintain spill deflector plates and/or wind shields during unloading of products;

(e) monitor and ensure that wind conditions are not causing excessive liftoff and emission of regulated bulk granular products; and

(f) undertake adequate sweeping and/or vacuuming to remove potential spillages during and/or post-loading or unloading activities.

6. The licence holder must instruct ship's masters that all spillage of regulated bulk granular products onto the deck of the vessels is to be collected in a manner as to prevent it from accessing the marine environment.

7. The licence holder must collect all spillage of regulated bulk granular products within the premises in a manner as to prevent it from accessing the environment.

8. The licence holder must ensure that measures are taken to prevent spillage of regulated bulk granular products from entering the marine environment via the gap between the berth and the vessel.

9. The licence holder must ensure that the loading, unloading, storage, and handling of the regulated bulk granular products listed in Table 1 are undertaken in accordance with the corresponding operational requirement at the corresponding operational location set out in Table 1.

Table 1: Premises operational requirements

Regulated bulk granular product	Operational requirement	Operational location
Mineral sands; Garnet.	• Product must be covered or tarped while being transported via haulage trucks at the premises. • Product must be stored within enclosed shed. • Product must be loaded at Berth 4, via an internal hopper or common user truck unloader onto the Berth 4 bulk handling facility circuit. • Garnet must be loaded via cascading chute.	Labelled as 'Berth 4', as shown in Schedule 1: Maps, Figure 2.
Lithium direct shipping ore; Spodumene concentrate.	• Product must be covered or tarped while being transported via haulage trucks at the premises. • Product must be stored within enclosed shed. • Product must be loaded at Berth 4, via an internal hopper or common user truck unloader onto the Berth 4 bulk handling facility circuit.	Labelled as 'Berth 4', as shown in Schedule 1: Maps, Figure 2.
Talc	• Product must be covered or tarped while being transported via haulage trucks at the premises. • Dust suppression must be undertaken during product unloading (from trucks), product stockpiling, and product loading. • Additional dust suppression or other dust mitigation measures must be undertaken where fugitive dust emissions are observed from the open stockpile. • Open stockpile height must be minimised as much as practicable and be no higher than the dust mitigation fence (labelled as 'Dust Mitigation Fence, as shown in Schedule 1: Maps, Figure 2) at any given time. • Dust mitigation fence integrity must be maintained while there is an open stockpile or while there are dust-generating activities (including stockpile disturbance) being undertaken. • Product must be loaded at Berth 4, via a common user truck unloader onto the Berth 4 bulk handling facility circuit.	Labelled as 'Talc Stockpile', as shown in Schedule 1: Maps, Figure 2.

Regulated bulk granular product	Operational requirement	Operational location
Clean fill	• Product must be covered or tarped while being transported via haulage trucks at the premises. • Product must be stored within enclosed shed or Rotainers (for clay). • Sand and gravel products may be loaded at Berth 4 and/or Berth 5, via an internal hopper onto their respective bulk handling facility circuit. • Clay products must be loaded at Berth 6, via Rotainer loading system.	Labelled as 'Berth 5' and 'Berth 6', as shown in Schedule 1: Maps, Figure 2.
Iron ore	• Product must be covered or tarped while being transported via haulage trucks at the premises. • Product must be stored within enclosed shed. • Product must be loaded at Berth 5 and/or Berth 7 via internal hopper onto enclosed conveyors. • Dust suppression system, using either water spray or dry fog, on the conveyor and shiploader must be operational during product loading at Berth 5 and Berth 7, where the product does not meet the relevant dust extinction moisture level.	Labelled as 'Berth 5' and 'Berth 7', as shown in Schedule 1: Maps, Figure 2.
Copper concentrate; Lead sulphide concentrate; Nickel concentrate; Zinc concentrate; Manganese ore; Iron concentrate; Mineral sand concentrate.	• Product must be stored within Rotainers whilst on the premises. • Product must be loaded at Berth 6, via Rotainer loading system (crane and rotating tipper frame), where Rotainers must remain closed at all times when outside of a vessel hold. • Rotainer tipping within a vessel hold may only occur when the Rotainer is below the level of the vessel deck. • Rotainer tipping must occur no more than two metres above the floor of the vessel hold or material level. • Dust suppression system, using dry fog, on the vessel hold must be operational during loading of iron concentrate, lead, and nickel. • Mineral sand concentrate must contain a product moisture content between 4% and 8.5% w/w, as averaged over each shipment • Iron concentrate must contain a product moisture content between 12% and 17% w/w, as averaged over each shipment. • Loading of iron concentrate must only be undertaken between November and April to minimise potential dust liftoff. • Loading of iron concentrate must not be undertaken when wind speed is 5 m/s or higher and wind direction is westerly (i.e., between 225 degrees and 337 degrees). • Particle size distribution of each distinct manganese ore product must be determined within 30 days of the first shiploading event for that product, and	Labelled as 'Berth 6', as shown in Schedule 1: Maps, Figure 2.

Regulated bulk granular product	Operational requirement	Operational location
	subsequently, on an annual basis. • Any wastewater generated from post-handling washdown activities must be collected and disposed offsite.	
Heavy mineral concentrate	• Product must be unloaded at Berth 6, via grab bucket or self-discharging vessel, and hopper. • Any wastewater generated from post-handling washdown activities must be collected and disposed offsite.	
Fertiliser		
Coal		

10. The licence holder must ensure that the site infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Berth 5 rail unloader; Berth 7 rail unloader.	• May accept and handle iron ore. • Dust suppression must be undertaken on empty rail wagons at the Berth 7 rail unloader prior to leaving the premises.	Labelled as 'Berth 5 Rail Unloader' and 'Berth 7 Rail Unloader', as shown in Schedule 1: Maps, Figure 2.
Lease 13 truck unloader; Lease 88 truck unloader.	• May accept and handle iron ore.	Labelled as 'Shed Truck Unloaders', as shown in Schedule 1: Maps, Figure 2.
Berth 4 common user truck unloader	• May accept and handle mineral sands, non-mineral sands, garnet, talc, lithium direct shipping ore, and spodumene concentrate. • Any wastewater generated from post-handling washdown activities must be treated via settling tanks and gross pollutant trap prior to being discharged into marine environment.	Labelled as 'Berth 4 Truck Unloader', as shown in Schedule 1: Maps, Figure 2.
Solid waste drying and storage facility	• Concrete pad, drains, and infiltration sumps must be maintained.	Labelled as 'Solid Waste Drying and Storage Facility', as shown in Schedule 1: Maps, Figure 2.

Trail conditions

Notification of a Trial

11. The licence holder must notify the CEO of any proposal to load or unload at the premises, any bulk granular material other than those specified in Schedule 3: Regulated bulk granular products, Table 13, in accordance with condition 12.

12. 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 that Trial commencing;

(c) include 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 Schedule 3: Regulated bulk granular products, Table 13, at the premises; or

  (ii) the loading or unloading of a bulk granular material specified in Schedule 3: Regulated bulk granular products, Table 13, 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 Schedule 3: Regulated bulk granular products, Table 13, 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 eco-toxicological 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.

(h) only when a CEO notification to cease a Trial has been issued in accordance with condition 13, and in the event that the licence holder is submitting a Trial amendment notification, then the licence holder must:

  (i) re-submit the requirements of conditions 12(a) to 12(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)

13. 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 12, it is determined that the proposed Trial will result in unacceptable impact to public health, amenity, or the environment; or

(ii) that following a review of any data received in accordance with condition 17, 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 12, when that difference is resulting in, or is likely to result in, an unacceptable impact to 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.

Noting in this condition prevents the licence holder from subsequently submitting an amendment in relation to the Trial. Any Trial amendment proposed by the licence holder must follow the notification requirements specified in condition 12(h).

Trial restrictions

14. 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.

15. 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) immediately upon receipt of a CEO notification to cease a Trial in accordance with condition 13,

whichever occurs first.

A Trial may only recommence upon notification of a Trial amendment, in accordance with condition 12(h).

16. 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, hazardous waste, or waste-derived by-products (except clean fill).

17. The licence holder must submit a report to the CEO, which includes the results of the monitoring specified in condition 12(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 wind 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.

18. The licence holder must record the date when 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 17.

Ongoing shipments and handling

19. In the event that approval is sought for the ongoing shipment 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 17, at least three months prior to the completion of the Trial period.

Emissions and discharges

Point source emissions to surface water

20. The licence holder must ensure that, where waste is emitted to surface water from the emissions points in Table 3 and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this licence.

Table 3: Emission points to surface water

Emission point reference and location	Description	Source	Requirements
SW1 – SW17 As shown in Schedule 1: Maps, Figure 3.	Discharge pipe outfall into Geraldton inner harbour	Stormwater runoff from premises and wider catchment area.	• Stormwater runoff and treated washdown water must be treated via gross pollutant trap prior to discharge at the corresponding emission points.
SW8, SW9 As shown in		Treated washdown water from Berth 4	

Emission point reference and location	Description	Source	Requirements
Schedule 1: Maps, Figure 3.		common user truck unloader facility and bulk handling facility circuit.	• Existing gross pollutant traps (labelled as 'Humeceptor' and 'Humegard', as shown in Schedule 1: Maps, Figure 3) must be maintained.

Dust emissions

21. The licence holder must ensure that reasonable and practicable measures are taken to ensure that dust generated on the premises does not cross the premises boundary.

Odour emissions

22. The licence holder must ensure that odour emitted from the premises does not unreasonably interfere with the health, welfare, convenience, comfort, or amenity of any person who is not on the premises.

Monitoring

23. The licence holder must ensure that all sample analyses are undertaken by laboratories with current NATA accreditation for the parameters being measured, unless indicated otherwise in the relevant condition.

24. The licence holder must ensure that:

(a) monitoring is undertaken in each biennial period such that there are at least 18 months in between the days on which samples are taken in successive biennial periods.

(b) monitoring is undertaken in each annual period such that there are at least nine months in between the days on which samples are taken in successive years;

(c) monitoring is undertaken in each quarterly period such that there are at least 45 days in between the days on which samples are taken in successive quarters.

25. The licence holder must ensure that all monitoring equipment used on the premises to comply with the conditions of this licence is calibrated in accordance with the manufacturer's specifications.

26. The licence holder must, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

27. The licence holder must undertake the monitoring in Table 4 according to the specifications in that table, and record and investigate results that do not meet any target specified in that table.

Table 4: Monitoring of ambient air quality

Monitoring point reference and location	Parameter	Unit[1]	Averaging period	Frequency[2]	Method	Target
1. Berth 1[3]; 2. Lemmon Road; 3. Port Way; 4. Connell Road, as shown in Schedule 1: Maps, Figure 4.	Particulates as PM_{10}	µg/m^3	10 minutes or less	Continuous	TEOM[4], in accordance with: AS/NZS 3580.9.8; AS 3580.19.	50[5]
	Particulates as PM_{10}		24 hours	On a campaign basis: (a) daily for the duration of the handling of metal concentrate.	HVAS[4], in accordance with: AS/NZS 3580.9.6; AS 3580.19.	50
	Copper as PM_{10}		24 hours			1.0
	Manganese as PM_{10}		24 hours			0.15
	Nickel as PM_{10}		Annual rolling average			0.02
	Lead as PM_{10}		24 hours			0.5 2.0 (Connell Road)
	Lithium as PM_{10}		24 hours			---

Note 1: All units are reference to STP dry.

Note 2: Continuous monitoring is permitted to include gaps equating to no more than two hours in every 24-hour averaging period, as required for the changing of HVAS sampler filter papers.

Note 3: Berth 1 monitoring point may be undertaken from either of the two monitoring locations shown in as shown in Schedule 1: Maps, Figure 4.

Note 4: Monitoring should also be undertaken in accordance with the latest revision of the Mid West Ports Air Quality Monitoring Sampling and Analysis Plan.

Note 5: Target should be compared against 24-hour average concentration.

28. The licence holder must undertake the monitoring in Table 5 and Table 6, according to the specifications in that table, and record and investigate results that do not meet any target specified in that table.

Table 5: Monitoring of ambient sediment quality

Monitoring point reference and location	Parameter	Unit	Averaging period	Frequency	Method	Limit[1]
1. CH1; 2. CH2; 3. CH3; 4. CH4; 5. CH5; 6. CH6; 7. CH7; 8. CH8; 9. CH9 10. CH10; 11. CS1;	Aluminium	mg/kg	Spot sample	Annually	Sediment sampling[2], in accordance with: AS/NZS 5667.1; AS/NZS 5667.12.	N/A[3]
	Arsenic					20
	Cadmium					1.5
	Copper					65
	Lead					50
	Lithium					N/A[3]
	Mercury					0.15
	Nickel					21
	Zinc					200

Monitoring point reference and location	Parameter	Unit	Averaging period	Frequency	Method	Limit[1]
12. CS2; 13. ORA1; 14. ORA2; 15. FBH1; 16. FBH2; 17. YM1; 18. TB1, as shown in Schedule 1: Maps, Figure 5.	Phosphate					N/A[3]
	Polycyclic aromatic hydrocarbon (PAH)			Biennially		10,000
	Tributyltin (TBT)					9
	Total organic carbon (TOC)					---
	Particle size distribution analysis (PSD)	%				---

Note 1: The median concentration of the parameter at each monitoring point shall be compared with the corresponding limit.

Note 2: Monitoring should also be undertaken in accordance with the latest revision of the Mid West Ports Sediment Sampling and Analysis Plan – Port of Geraldton Sediment Monitoring Program Sampling and Analysis Plan.

Note 3: Default guideline value not available. Limit should be derived in accordance with EPA (2016) technical guidance.

Table 6: Monitoring of ambient sediment pore water quality

Monitoring point reference and location	Parameter	Unit	Averaging period	Frequency	Method	Limit
1. CH6; 2. CH7; 3. CH8; 4. CS1; 5. CS2, as shown in Schedule 1: Maps, Figure 5.	Chromium	mg/L	Spot sample	Annually, when iron concentrate has been loaded within that annual period.	Pore water sampling[1], in accordance with: AS/NZS 5667.1; Simpson and Batley (2016).	0.0044
	Cobalt					0.001
	Selenium					---
	Vanadium					0.1
1. CH3; 2. CH4; 3. CS1; 4. CS2, as shown in Schedule 1: Maps, Figure 5.	Lithium	mg/L		Annually, when lithium direct shipping ore and/or spodumene concentrate has been loaded within that annual period.		0.5

Note 1: Monitoring should also be undertaken in accordance with the latest revision of the Mid West Ports Sediment Sampling and Analysis Plan – Port of Geraldton Sediment Monitoring Program Sampling and Analysis Plan.

29. The licence holder must monitor the marine water for concentrations of the parameter listed in Table 7:

(a) at the corresponding monitoring location;

(b) for the corresponding parameter;

(c) in the corresponding unit;

(d) for the corresponding averaging period;

(e) at no less than the corresponding frequency;

(f) using the corresponding method; and

(g) must not exceed the corresponding limit,

as set out in Table 7.

Table 7: Monitoring of ambient marine water quality

Monitoring point reference and location	Parameter	Unit	Averaging period	Frequency	Method	Limit
1. B4D1; 2. B4D2; 3. B5D1; 4. B5D2; 5. B7D1; 6. B7D2; 7. CH9; 8. CH11; 9. CH12; 10. Ref1; 11. Ref2, as shown in Schedule 1: Maps, Figure 5.	Arsenic	mg/L	Spot sample	Quarterly	Grab sampling, in accordance with: AS/NZS 5667.1; AS/NZS 5667.9.	---
	Cadmium					
	Copper					
	Iron					
	Lead					
	Lithium					
	Mercury					
	Nickel					
	Silver					
	Vanadium					
	Zinc					
	Total nitrogen					
	Nitrate					
	Ammonia					
	Phosphate					
	Polycyclic aromatic hydrocarbon (PAH)					
	Perfluoro-octanesulfonic acid (PFOS)					
1. PWS1; 2. PWS2; 3. PWS3; 4. PWS4, as shown in Schedule 1: Maps, Figure 5.	Cadmium[1]		30 days (± 5 days)	Monthly	Passive water sampler, in accordance with: AS 5667.1; Simpson and Batley (2016).	---
	Cobalt[1]					
	Copper[1]					
	Lead[1]					
	Nickel[1]					
	Zinc[1]					
1. B6N; or 2. B6S, as shown in Schedule 1: Maps, Figure 6.	Total iron (unfiltered)[1]	mg/L	Spot sample	On a campaign basis: (a) once immediately prior to handling of iron concentrate; and (b) daily for the duration of the handling of iron	Grab sampling, in accordance with: AS 5667.1; AS 5667.9. Analysed via field test kit.	10

Monitoring point reference and location	Parameter	Unit	Averaging period	Frequency	Method	Limit
				concentrate.		

Note 1: Non-NATA-accredited analysis permitted.

30. The licence holder must monitor emissions:

(a) at the corresponding monitoring location;

(b) for the corresponding parameter;

(c) in the corresponding unit;

(d) for the corresponding averaging period;

(e) at no less than the corresponding frequency;

(f) using the corresponding method; and

(g) must not exceed the corresponding limit,

as set out in Table 8.

Table 8: Emissions and discharge monitoring

Monitoring point reference and location	Parameter	Unit	Averaging period	Frequency	Method	Limit
1. SW14 (or at associated HumeCeptor), as shown in Schedule 1: Maps, Figure 3.	Total nitrogen	mg/L	Spot sample	On a campaign basis: (a) daily for the duration of the handling of fertiliser; and (b) four days after handling of fertiliser has been completed.	Grab sampling, in accordance with: AS 5667.1; AS 5667.10.	---
	Nitrate					---
	Ammonia					---

Records and reporting

31. 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 complainants (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.

32. 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 the conditions of this licence;

(c) monitoring programmes undertaken in accordance with conditions 27, 28, 29, and 30 of this licence; and

(d) complaints received under condition 31 of this licence.

33. The books specified under condition 32 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.

34. 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 31 August each year.

35. The licence holder must:

(a) prepare an Environmental Report that provides information in accordance with Table 9 for the preceding annual period; and

(b) submit that Environmental Report to the CEO by 31 August each year.

Table 9: Environmental reporting requirements

Condition or table (if relevant)	Parameter	Format or form
Condition 1 to 3; Condition 5 to 10.	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.	None specified.
Condition 4	Summary of product moisture content during each shiploading event, including where product DEM level was not achieved and actions taken.	None specified.
Condition 9 (Table 1)	Particle size distribution of each distinct manganese ore product (lump and fines).	None specified.
Condition 27 (Table 4)	Ambient air quality monitoring.	Assessment of monitoring results against the targets/limits specified in the relevant tables, as well as previous monitoring results, and shown in graphical form. Description of limit exceedances, date of exceedance, as well as investigative and corrective actions taken. Investigation should include risk assessment of the exceedance parameter. Analytical data and relevant shiploading dates (for campaign-based monitoring) provided in tabulated form.
Condition 28 (Table 5 and Table 6)	Ambient sediment and pore water quality monitoring	
Condition 29 (Table 7)	Ambient marine water quality monitoring	
Condition 30 (Table 8)	Stormwater discharge quality monitoring	
Condition 31	Complaints summary	None specified.
Condition 34	Compliance	Annual Audit Compliance Report

Condition or table (if relevant)	Parameter	Format or form
		(AACR)

36. The licence holder must submit the information in Table 10 to the CEO according to the specifications in that table.

Table 10: Non-annual reporting requirements

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form[1]
Condition 27 (Table 4); Condition 28 (Table 5 and Table 6); Condition 29 (Table 7); Condition 30 (Table 8).	Copies of original monitoring reports submitted to the licence holder by third parties.	Not applicable.	Within 14 days of the CEO's request.	As received by the licence holder from third parties.
Condition 27 (Table 4)	Ambient air quality target exceedances	Quarterly	Within 30 days after the end of each quarterly period.	Description of exceedances (including concentrations for all parameters specified in Table 4), dates of exceedances, operational description and meteorological conditions at the time of exceedance, potential source(s) of exceedances, investigative and corrective actions taken.

Notification

37. The licence holder must ensure that the parameters listed in Table 11 are notified to the CEO in accordance with the notification requirements of the table.

Table 11: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form
Condition 28 (Table 5 and Table 6); Condition 29 (Table 7).	Breach of any limit specified in the licence.	Part A: As soon as practicable, but no later than 5pm of the next usual working day; Part B: As soon as practicable.	N1[2]
Condition 1 to 10	Any failure or malfunction of any pollution control equipment or any incident which has caused, is causing, or may cause pollution.		
Condition 25 and 26	Calibration report.	As soon as practicable.	None specified.

Note 1: Notification requirements in the licence shall not negate the requirement to comply with section 72 of the EP Act.
Note 2: Forms are in Schedule 2.

Specified actions

38. Prior to 17 May 2025, the licence holder must retain the services of a suitably qualified acoustics professional to:

(a) investigate the nature and extent of noise emissions from the premises, including undertaking attended noise monitoring and unattended noise monitoring (including continuing audio signal recording), during normal bulk material loading and/or unloading operations at four or more berths;

(b) assess noise emissions in accordance with the methodology required in the *Environmental Protection (Noise) Regulations 1997*, the compliance of the noise emissions from bulk material loading and/or unloading activities against the relevant assigned noise levels specified in the *Environmental Protection (Noise) Regulations 1997*; and

39. The licence holder must, within 60 calendar days of undertaking the investigation required by condition 38, prepare and submit to the CEO a report on the investigation.

40. The report required by condition 39 must include, as a minimum, the following:

(a) a description of the methods used for the attended and unattended monitoring of noise emissions from the premises, including the monitoring locations, monitoring duration, and frequency, as well as justification for these methods;

(b) details and results of the investigation undertaken pursuant to condition 38(a);

(c) details and results of the assessment of the noise emissions from the premises, against the relevant assigned noise levels in the *Environmental Protection (Noise) Regulations 1997* undertaken pursuant to condition 38(b); and

(d) an assessment of noise levels against the most recent predicted noise levels at the relevant monitoring locations.

41. Where the assessment pursuant to condition 38 indicates that noise emissions do not comply with the relevant assigned noise levels in the *Environmental Protection (Noise) Regulations 1997*, the licence holder must:

(a) within 30 calendar days, prepare a plan to ensure the undertaking of bulk material loading and/or unloading operations at the premises will no longer lead to any contravention of the *Environmental Protection (Noise) Regulations 1997*; and

(b) provide to the CEO a copy of the plan prepared pursuant to condition 41(a).

Definitions

In this licence, the terms in Table 12 have the meanings defined.

Table 12: Definitions

Term	Definition
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 1 July until 30 June of the immediately following year.
annual rolling average	means the 12-month average calculated using the Monthly Average using the following formula: $\frac{\text{Monthly Average} + \Sigma \text{ Previous 11 Monthly Averages}}{12}$
assigned noise level	means a noise level determined under Regulation 8 of the *Environmental Protection (Noise) Regulations 1997*.
AS 3580.19	refers to the *Australian Standard AS 3580.19: Methods for sampling and analysis of ambient air, Method 19: Ambient air quality data validation and reporting.*
AS 4156.6	refers to the *Australian Standard AS4156.6: Coal preparation, Part 6: Determination of dust/moisture relationship for coal.*
AS/NZS 3580.9.6	refers to the *Australian/New Zealand Standard AS/NZS 3580.9.6: Methods for sampling and analysis of ambient air, Method 9.6: Determination of suspended particulate matter – PM_{10} high volume sampler with size selective inlet – Gravimetric method.*
AS/NZS 3580.9.8	refers to the *Australian/New Zealand Standard AS/NZS 3580.9.8: Methods for sampling and analysis of ambient air, Method 9.8: Determination of suspended particulate matter – PM_{10} continuous direct mass method using a tapered element oscillating microbalance analyser.*
AS/NZS 5667.1	refers to the *Australian/New Zealand Standard AS/NZS 5667.1: Water quality – Sampling, Part 1: Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.*
AS/NZS 5667.9	refers to the *Australian/New Zealand Standard AS/NZS 5667.9: Water quality – Sampling, Part 9: Guidance on sampling from marine waters.*
AS/NZS 5667.10	refers to the *Australian/New Zealand Standard AS/NZS 5667.10: Water quality – Sampling, Part 10: Guidance on sampling of waste waters.*
AS/NZS 5667.12	refers to the *Australian/New Zealand Standard AS/NZS 5667.12: Water quality – Sampling, Part 12: Guidance on sampling of bottom sediments*.
averaging period	means the time over which a limit or target is measured, or a monitoring result is obtained.
books	has the same meaning given to that term under the EP Act.

Term	Definition
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
clean fill	as defined by the *Landfill Waste Classification and Waste Definitions 1996* (as amended 2019).
construction or demolition waste	as defined by the *Landfill Waste Classification and Waste Definitions 1996* (as amended 2019).
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 standard as approved by the CEO.
department; DWER	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
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.
EPA (2016) technical guidance	refers to the *Technical Guidance: Protecting the Quality of Western Australia's Marine Environment*, published by the Environmental Protection Authority of Western Australia in 2016.
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
hazardous waste	as defined by the *Landfill Waste Classification and Waste Definitions 1996* (as amended 2019).
HVAS	means high volume air sampler.
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.
metal concentrate	refers to copper concentrate, lead sulphide concentrate, nickel concentrate, zinc concentrate, manganese ore, iron concentrate, lithium direct shipping ore, and/or spodumene concentrate.
moisture content	means the ratio of the mass of water in a sample to the mass of solids in

Term	Definition
	the sample, expressed as a percentage. In equation form: $$w = \frac{m_1 - m_2}{m_1} \times 100$$ 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.
monthly average	means the average concentration calculated each calendar month using the following formula: $$\frac{(A \times B) + C}{\text{Number of days in calendar month}}$$ Where: A = the average concentration calculated from all 24-hour sample collected during the calendar month. B = the number of 24-hour periods in the calendar month where sampling was not required. C = the sum of all 24-hour samples collected during the calendar month.
mg/kg	means milligrams per kilogram.
mg/L	means milligrams per litre.
m/s	means metres per second.
NATA	means the National Association of Testing Authorities, Australia.
NATA-accredited	means in relation to the analysis of a sample that the laboratory is NATA-accredited for the specified analysis at the time of the analysis.
PM_{10}	means particles with an aerodynamic diameter or less or equal to 10 µm.
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 Figure 1 in Schedule 1: Maps to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
quarterly	means the four inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March.
regulated bulk granular products	means bulk granular products that are regulated under this licence, as specified in Schedule 3: Regulated bulk granular products, Table 13.
Rotainer	means bulk handling cargo boxes used to load bulk materials into vessel holds via a roating lifting frame suspended from a harbour crane.
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Schedule 2	means Schedule 2 of this Licence unless otherwise stated.

Term	Definition
Schedule 3	means Schedule 3 of this Licence unless otherwise stated.
shiploading event	means any shiploading where regulated bulk granular products is loaded onto or unloaded from a vessel.
Simpson and Batley (2016)	refers to the *Sediment quality assessment: A practical guide*, authored by Simpson, SL and Batley, GE and published by CSIRO Publishing in 2016.
spot sample	means a discrete sample representative of the time and place at which the sample is taken.
STP	means standard temperature and pressure.
suitably qualified acoustics professional	means a person qualified and experienced in the area of environmental noise assessment and who, by their qualifications and experience, is eligible to hold membership of the Australian Acoustical Society or the Australian Association of Acoustical Consultants.
TEOM	means Tapered Element Oscillating Microbalance unit.
Trial	means a test period during which the licence holder loads or unloads a new bulk granular material, not currently specified in Schedule 3: Regulated bulk granular products, Table 13, at the premises, in accordance with conditions 11 to 19.
waste	has the same meaning given to that term under the EP Act.
µg/m^3	means micrograms per cubic metre.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

Figure 1: Map of the boundary of the prescribed premises

Figure 2: Site layout and infrastructure

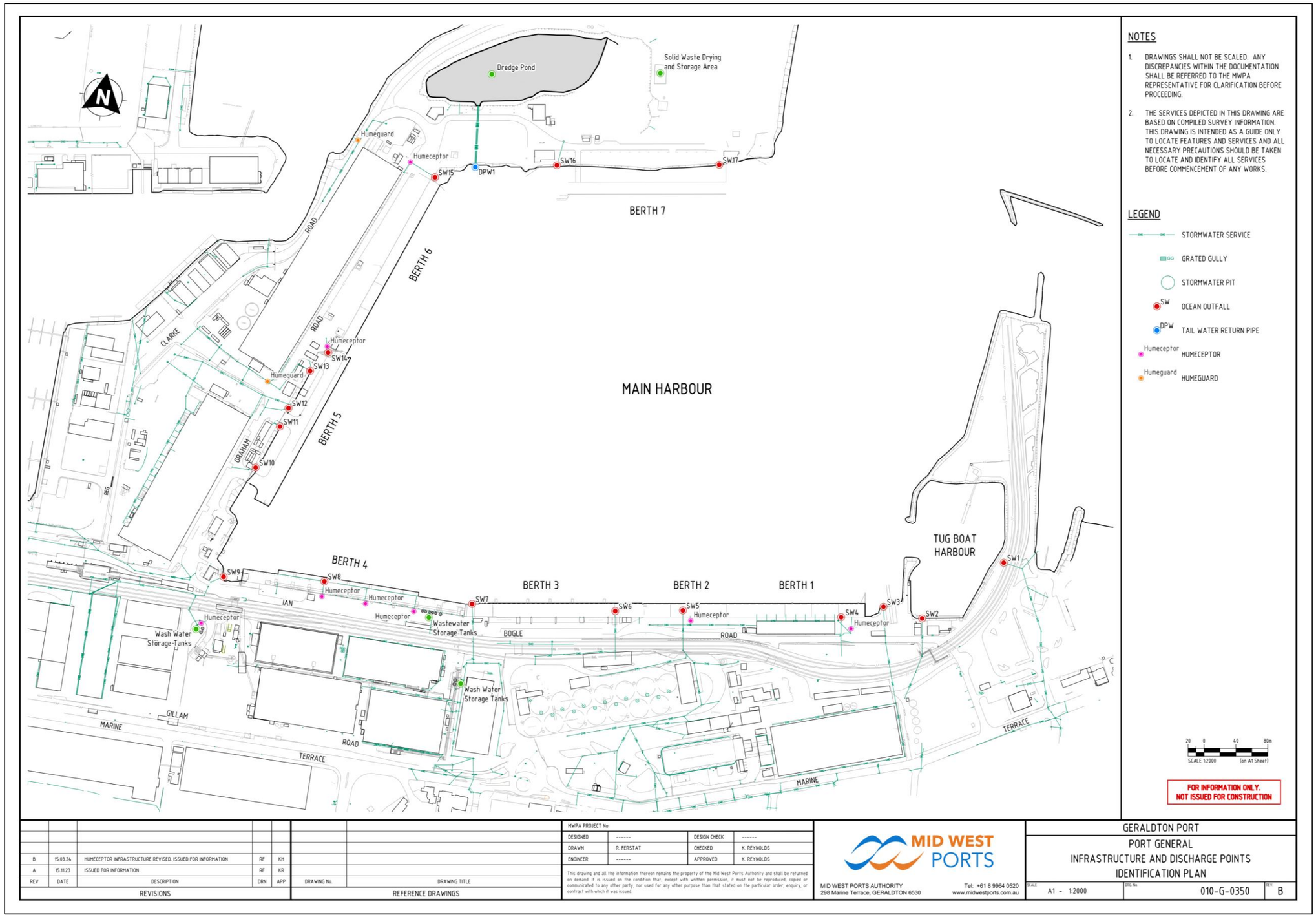

Figure 3: Map of drainage network and emission points

Figure 4: Map of ambient air quality and meteorological monitoring locations

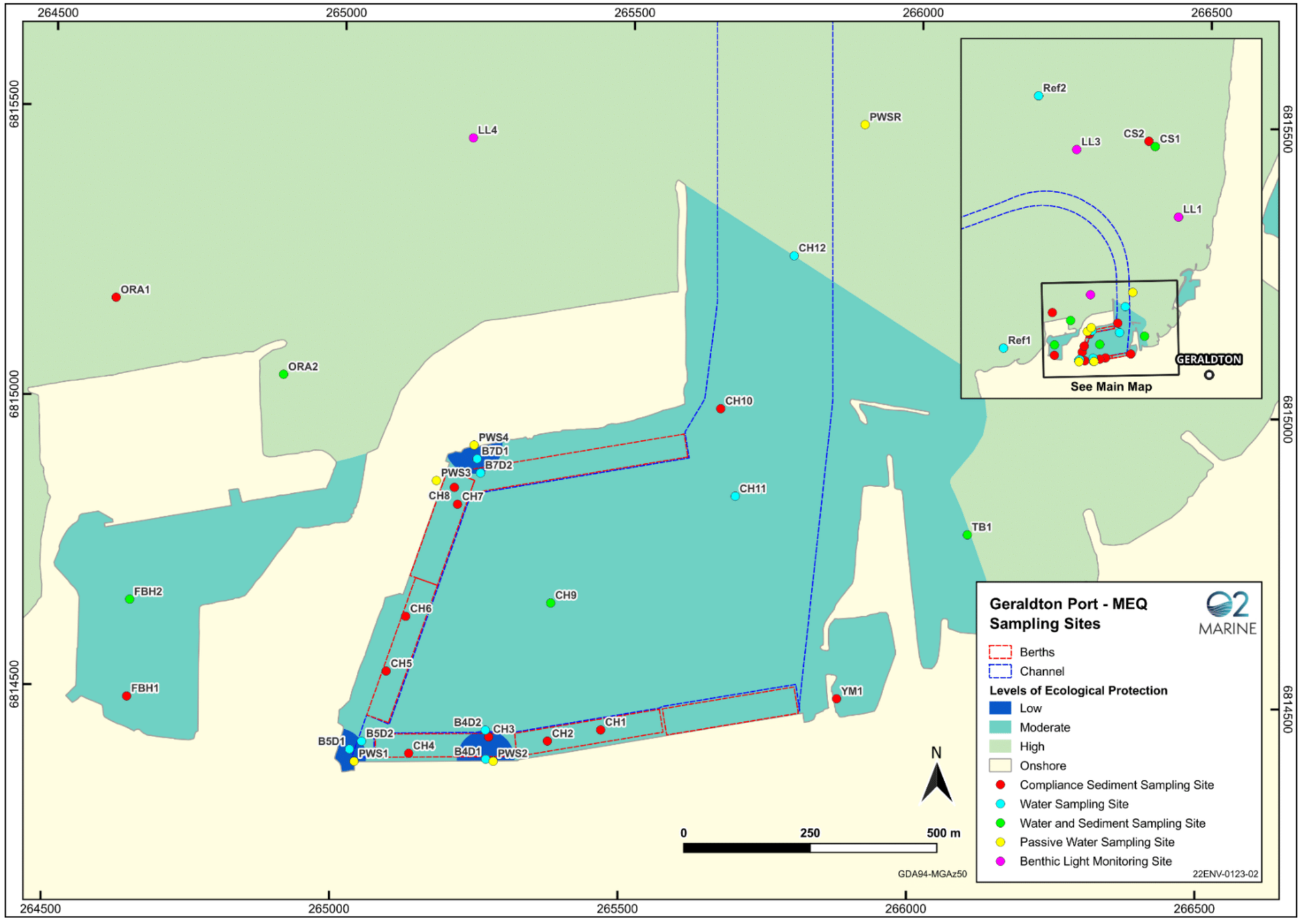

Figure 5: Map of ambient sediment and pore water quality, as well as marine water quality monitoring locations

Figure 6: Map of ambient marine water monitoring locations (campaign basis)

Schedule 2: Forms

Form: N1

Government of Western Australia
Department of Water and Environmental Regulation

Licence:	Licence holder:
Form: N1	Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence number	
Name of operator	
Location of premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Monitoring point reference/source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of licence holder	
Date	

Schedule 3: Regulated bulk granular products

Table 13: Regulated bulk granular products

Regulated products	Relevant authorisation date
Mineral sands (including zircon, ilmenite, rutile, and leucoxene)	Renewal of licence L4275/1982/15, granted on 12 March 2015.
Garnet	
Talc	
Coal	
Iron ore	
Copper concentrate	
Lead sulphide concentrate	
Nickel concentrate	
Zinc concentrate	
Heavy mineral sand concentrate	
Manganese ore	Amendment to licence L4275/1982/15, granted on 15 August 2018 (Amendment Notice 1)
Clean fill (including non-silica sands, gravel, and clay)	Amendment to licence L4275/1982/15, granted on 22 March 2021.
Fertiliser (including urea, potash-, phosphate-, and potassium carbonate-based fertiliser)	Amendment to licence L4275/1982/15, granted on 21 January 2019 (Amendment Notice 2). Amendment to licence L4275/1982/15, granted on 22 March 2021.
Mineral sand concentrate	Renewal of licence L4275/1982/15, granted on 12 March 2015. Amendment to licence L4275/1982/15, granted on 22 March 2021.
Iron concentrate	Amendment to licence L4275/1982/15, granted on 19 September 2021.
Lithium direct shipping ore	Amendment to licence L4275/1982/15, granted on 23 January 2024
Spodumene concentrate	