



Licence Number	L4275/1982/15	
Licence Holder	Mid-West Ports Authority	
Registered business address	298 Marine Terrace GERALDTON WA 6530	
File Number	2011/000451-3	
Duration	18/03/2015 to	17/03/2025
Date of amendment	23/09/2021	
Premises details	Geraldton Port Part of Lot 503 on plan 57801 GERALDTON WA 6530 As defined in Schedule 1.	

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	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 16,000,000 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 following conditions, on 23 September 2021 by:

Lauren Edmands

**MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES**

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

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Introduction

This Introduction is not part of the Licence conditions.

DWER's industry licensing role

The Department Water and Environmental Regulation (DWER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DWER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DWER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DWER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DWER also monitors and audits compliance with works approvals and Licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licence Holder, the intention is not to replicate them in the Licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link: <http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.

- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your Licence. Non-compliance with your Licence is an offence and strict penalties exist for those who do not comply.

Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a Works Approval, Licence, closure notice or environmental protection notice.

Licence fees

If you have a Licence that is issued for more than one year, you are required to pay an annual Licence fee prior to the anniversary date of issue of your Licence. Non-payment of annual Licence fees will result in your Licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new Licence for your Premises.

Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

The Geraldton Port is managed by the Mid West Ports Authority (MWPA) and is located to the north west of the city centre of Geraldton, approximately 430 km north of Perth. The Port is located on the northern shores of Point Moore and situated within the south-eastern corner of Champion Bay. The Port is surrounded by land zoned Industrial, Commercial and Residential. The nearest residence is located at Crowther St, Beachlands, approximately 100 m south of the port boundary.

The Geraldton Port consists of a shipping channel, a 7-berth inner harbour, a fishing boat harbour, a small work boat base and related storage facilities, infrastructure and industries.

This Licence regulates activities associated with the loading/unloading and storage of bulk granular material. Other prescribed activities occurring at the port such as boat building and seafood processing are regulated through separate DWER instruments held by the occupiers of these premises.

The handling of the following bulk granular products are regulated under this Licence:

- Iron ore
- Lead sulphide concentrate
- Copper concentrate
- Zinc concentrate
- Nickel concentrate
- Talc
- Coal
- Mineral sands
- Mineral sands concentrate
- Manganese
- Fertilisers

- Clean fill
- Iron concentrate

Other granular and non-granular products are also handled at the Port. These include:

- Grains
- Petroleum
- General cargo
- Stockfeed
- Livestock

The Port has a maximum bulk granular product handling capacity of 16,000,000 tonnes per annum (tpa) which is largely determined by the limitations of the predominantly rail-based delivery system. Over 14,000,000 tpa this capacity is centred on iron ore exports through berths 5 and 7.

The main emissions of note from the Port are lead, copper and nickel dust from the loading and handling of up to approximately 550,000 of metal concentrates per year, as well as the fugitive discharge of these materials into the harbour. These emissions are managed in the Licence through a comprehensive dust monitoring and analysis programme from four air quality monitoring stations onsite; annual sediment monitoring; general housekeeping conditions; and reporting and notification requirements.

The Licence reissue included a conversion to the Department's 'Refire' format. As a result, changes to the Licence format and wording has occurred. As part of the Refire conversion process, a number of standard conditions were also introduced.

Previous Licence reissue also included changes as follows:

- Removal of the requirement for monitoring ambient air concentrations of zinc due to insignificant levels demonstrated in historical monitoring.
- Replacement of monthly air quality reporting requirements with requirements based on target exceedances and quarterly reporting of lead levels.
- The renaming of several of the sediment monitoring sites in line with MWPA protocol.

The Licences and Works Approvals issued for the Premises since 18 March 2009 are:

Instrument log		
Instrument	Issued	Description
L4275/1982/13	18/03/2008	Licence re-issue
W4398/2007/1	26/06/2008	Construction of metal concentrate storage shed
W4443/2008/1	15/09/2008	Construction of iron ore storage shed at Berth 5
W4461/2008/1	01/12/2008	Construction of iron ore storage shed at Berth 6
W4462/2008/1	28/09/2009	Construction of iron ore storage shed at Berth 6
W4805/2010/1	13/12/2010	Construction of loading/unloading infrastructure
L4275/1982/13	09/02/2011	Licence amendment: change of copper air quality target
L4275/1982/13	08/09/2011	Licence amendment: change of lead air quality limit
L4275/1982/14	18/03/2012	Licence re-issue
L4275/1982/14	03/01/2013	Licence amendment: trial nickel exports
W5345/2013/1	04/03/2013	Works approval for new cargo: nickel
L4275/1982/14	14/02/2014	Licence amendment for new cargo: nickel
L4275/1982/15	12/03/2015	Licence re-issue and REFIRE conversion
L4275/1982/15	15/08/2018	Amendment Notice 1: authorised to handle up to 300,000 tonnes per year of manganese ore out of Berth 6.

L4275/1982/15	21/01/2019	Amendment Notice 2: To allow for Trial conditions to apply to evaporites including gypsum, salt and potash under Category 58A.
W6329/2019/1	23/01/2020	Works approval to handle mineral sands concentrate.
L4275/1982/15	03/03/2020	DWER initiated amendment to amalgamate Amendment Notices 1 and 2 in the Licence. During amalgamation process no risk assessment of the Premises was undertaken.
L4275/1982/15	23/09/2021	Amendment updating daily tonnage throughput to reflect current operations. Addition of mineral sands concentrate, clean fills and fertiliser as authorised bulk products to handle.
L4275/1982/15	23/09/2021	Amendment to authorise handling of iron concentrate at Berth 6

Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION

Licence conditions

1 General

1.1 Interpretation

1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

‘AACR’ Annual Audit Compliance Report means a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO from time to time and published on the Department’s website.

‘Act’ means the *Environmental Protection Act 1986*;

‘Amendment Application’ means refers to the application for amendment to Licence L4275/1992/15 received by the Department on 12 January 2018;

‘Annual Period’ means the inclusive period from 1 July until 30 June in the following year;

‘Annual Rolling Average’ means the 12 month average calculated using the Monthly Average using the following formula:

$$\frac{\text{Monthly Average} + \sum \text{Previous 11 Monthly Averages}}{12}$$

‘Averaging Period’ means the time over which a limit or target is measured or a monitoring result is obtained;

‘ANZECC/ARMCANZ Guidelines’ means the Australian and New Zealand Environment and Conservation Council (2000), *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, Australian and New Zealand Environment and Conservation Council & Agriculture and Resource Management Council of Australia and New Zealand, National Water Quality Management Strategy No. 4 & 7.

‘AS4156.6-2000’ means Australian Standard AS4156.6-2000: Determination of Dust/moisture Relationship for Coal;

‘Assessment Levels for Soil, Sediment and Water, DoE 2010’ means the document titled *Assessment Level for Soil, Sediment and Water, Contaminated Sites Management Series*, prepared by the Department of Environment and Conservation, Government of Western Australia;

‘Assigned Level’ means a noise level determined under regulation 8 of the Noise Regulations;

‘averaging period’ means the time over which a limit or target is measured or a monitoring result is obtained;

‘CEO’ means Chief Executive Officer of the Department of Water and Environmental Regulation;

‘CEO’ for the purpose of correspondence means;

Chief Executive Officer

Department Administering the Environmental Protection Act 1986

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‘Clean fill’ As defined by the Landfill Waste Classification and Waste Definitions 1996 (as amended April 2018).

‘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.

‘DWER’ means Department of Water and Environmental Regulation;

‘environmentally hazardous material’ means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

‘EPA 2005’ means *Manual of Standard Operating Procedures – For Environmental monitoring against Cockburn Sound Environmental Quality Criteria (2003-2004) – A supporting document to the State Environmental (Cockburn Sound) Policy 2005*, Prepared by Environmental Protection Authority, Report no. 21, Western Australia, January 2005.

‘fugitive emissions’ means all emissions not arising from point sources identified in sections 2.2, 2.3, 2.4 and 2.5;

‘Midwest Ports Authority Air Quality Monitoring Sampling and Analysis Plan’ means *Midwest Ports Authority Air Quality Monitoring Sampling and Analysis Plan Revision 5* Prepared by Midwest Ports Authority, dated 30 January 2014;

‘Midwest Ports Authority Sediment Monitoring Sampling and Analysis Plan’ means *Midwest Ports Authority 2015 Sediment Monitoring Program - Sampling and Analysis Plan, Revision 4* Prepared by Midwest Ports Authority, dated 25 November 2014;

‘HVAS’ is defined as High Volume Air Sampler;

‘Licence’ means this Licence numbered L4275/1982/15 and issued under the Act;

‘Licence Holder’ means the person or organisation named as Licence Holder on page 1 of this Licence;

‘Metal Concentrate Shed’ means any shed used to store lead sulphide concentrate, copper concentrate and zinc concentrate;

‘Metal Concentrate’ means lead sulphide concentrate, copper concentrate, zinc concentrate or nickel concentrate;

'm/s' is defined as metres per second;

'Mtpa' means million tonnes per annum;

'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:

$$w = \frac{m_1 - m_2}{m_1} \times 100$$

Where:

w = moisture content of sample;

m₁ = initial mass, in grams, of the test portion; and

m₂ = 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.

'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;

'PM₁₀' means particles with an aerodynamic diameter of less or equal to 10 µm;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of this Licence;

'quarterly' means the 4 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;

'Schedule 1' means Schedule 1 of this Licence unless otherwise stated;

'Schedule 2' means Schedule 2 of this Licence unless otherwise stated;

'Schedule 3' means Schedule 3 of this Licence unless otherwise stated;

'Shiploading Event' means any shiploading where bulk Metal Concentrate is loaded into a ship or unloaded out of a ship;

'spot sample' means a discrete sample representative at the time and place at which the sample is taken;

'TDS' means total dissolved solids;

'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 Condition 1.3.1 the Existing Licence, at the Premises, in accordance with Conditions 1.4;

‘TSP’ means total suspended particulates;

‘µg/kg’ means micrograms per kilogram; and

‘µg/m³’ means micrograms per cubic metre.

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.

1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.

1.2 General conditions

1.2.1 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:

- (a) pollution;
- (b) unreasonable emission;
- (c) discharge of waste in circumstances likely to cause pollution; or
- (d) being contrary to any written law.

1.2.2 The Licence Holder shall operate and maintain all pollution control and monitoring equipment to the manufacturer’s specification or any relevant and effective internal management system.

1.2.3 The Licence Holder, except where storage is prescribed in section 1.3, shall ensure that environmentally hazardous materials are stored in accordance with the code of practice for the storage and handling of dangerous goods.

1.2.4 The Licence Holder shall immediately recover or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.2.5 The Licence Holder shall;

- (a) implement all practical measures to prevent stormwater run-off 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.¹

Note 1: The Environmental Protection (Unauthorised Discharges) Regulations 2004 make it an offence to discharge certain materials into the environment.

1.2.6 The Licence Holder shall ensure that a dust filtration system is in operation on any iron ore or metal concentrate shed whenever dust generating activities (including any stockpile disturbance) are being undertaken within the shed.

1.3 Premises operation

1.3.1 The Licence Holder shall notify the CEO in accordance with Condition 1.4 of this Licence of any proposal to load or unload at the premises, any bulk granular material other than iron ore, lead sulphide concentrate, copper concentrate, zinc concentrate, nickel concentrate, talc, coal, mineral sands or mineral sands concentrate, fertilisers or manganese ore.

- 1.3.2 The Licence Holder shall instruct ship's masters that all spillage of cargo onto the deck of the vessel is to be collected in a manner so as to prevent it accessing the marine environment.
- 1.3.3 The Licence Holder shall collect all spillage of iron ore, talc, mineral sands, mineral sands concentrate, metal concentrate, clean fill and fertiliser within the premises in a manner so as to prevent it accessing the environment.
- 1.3.4 The Licence Holder shall ensure that measures are taken to prevent spillage entering the marine environment via the gap between the berth and the vessel.
- 1.3.5 The licence holder must ensure that activities listed in Table 1.3.1 are undertaken in accordance with the corresponding operational requirement and location set out in Table 1.3.1

Table 1.3.1 Operational requirements		
Activity	Operational requirement	Infrastructure location
Export of mineral sands concentrate (MSC)	<ul style="list-style-type: none"> MSC loaded from Berth 6. MSC loaded in sealed containers that are emptied into the hold of the vessel using a rotating tipping frame. Containing a product moisture content between 4 % and 8.5 % w/w, as averaged over each shipment, with each shipment details recorded and maintained. Loaded from vertical drop height of less than 2 metres within the hold of the vessel. Following each shipment of MSC, areas must be swept where mineral sand was loaded and transported including, but not limited to, Berth 6 and the trafficable route in and out of that Berth. MSC waste material to be recovered from Berth clean-up activities is returned to Eneabba mine site. No product storage on site. 	Schedule 1: Maps
Handling of fertiliser	<ul style="list-style-type: none"> Unloading from Berth 6 or Berth 2. Dedicated washdown area for clean down of equipment used in the unloading of fertiliser based products. Contaminated washwater captured and removed off site. 	
Clean fill	<ul style="list-style-type: none"> (non-silica) sands stored in enclosed sheds and loaded from Berth 4 or Berth 5. Clay stored in enclosed sheds or rotainer storage area, handled in retainers via Berth 6. 	
Iron concentrate	<ul style="list-style-type: none"> Product transported in fully enclosed retainers to premises. Retainers containing iron concentrate washed down prior transport to premises . Operational moisture range of 12-17% during handling. Dust suppression during ship loading shall be operational. Product handled via Berth 6. Loading only between November and April each year when winds are predominantly from the south. No loading when westerly (between 225 and 337 degrees) wind conditions are over 10 knots. 	

- 1.3.6 The Licence Holder must:
- (a) operate shed dust extraction equipment at all times when in-loading manganese ore into the manganese ore shed or when loading manganese ore into containers, resulting in a negative-pressure effect within the shed;
 - (b) keep the manganese ore shed closed when loading manganese ore into containers, unless doors are open for the ingress or egress of trucks;
 - (c) wash truck wheels prior to leaving the storage shed for the purpose of preventing the tracking out of manganese dust; and
 - (d) ensure that all manganese ore containers remain closed at all times when outside of the ship's hold and manganese ore storage shed.
- 1.3.7 Following each shipment of manganese ore, the Licence Holder must sweep all areas within the Premises where manganese ore is transported including, but not limited to, Berth 6 and the trafficable route from the manganese ore stockpile shed.
- 1.3.8 Where the DEM level can be determined for a distinct manganese ore product, the Licence Holder must only accept that product if it contains a Moisture Content above the DEM level.
- 1.3.9 For the purpose of determining compliance with Condition 1.3.8, the Licence Holder must obtain and maintain for each manganese ore product:
- (a) accurate records of the DEM level, as derived from the application of AS4156.6-2000; or
 - (b) a declaration from a third party laboratory stating that determination of DEM is not possible for that distinct manganese ore product.
- 1.3.10 The Licence Holder must obtain and maintain accurate records of the representative Moisture Content for each shipment of manganese ore (fines and lump).
- 1.3.11 The Licence Holder must within 30 days of the first shipment from the Premises of each distinct bulk manganese ore, and on a subsequent annual basis, determine the particle size distribution for each manganese ore product.

1.4 Trial conditions

Notification of a Trial

- 1.4.1 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 that Trial commencing;
 - (c) 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;
 - (d) 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;
- (e) include an analysis of risks to the environment, public health and amenity from potential discharges, dust, odour and noise emissions associated with the Trial;
- (f) 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
- (g) only when a CEO notification to cease a Trial has been issued in accordance with Condition 1.4.2, 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 1.4.1(a) – (f);
 - (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)

1.4.2 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 1.4.1, 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 1.4.5, 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 1.4.1, 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 1.4.1(g).

Trial Restrictions:

1.4.3 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 1.4.2, whichever occurs first.

A Trial may only recommence upon notification of a Trial amendment, in accordance with Condition 1.4.1 (g).

- 1.4.4 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 a waste or waste-derived by-product (except Clean fill).

Reporting

- 1.4.5 The Licence Holder must submit a report to the CEO which includes the results of monitoring required by condition 1.4.1(f), 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.

Ongoing shipments

- 1.4.6 In the event that approval for the ongoing shipments of the Trial material is sought, the Licence Holder must provide an application for Licence amendment, along with a report fulfilling the requirements of Condition 1.4.5, at least three months prior to the completion of the Trial period.

2 Emissions

2.1 General

- 2.1.1 The Licence Holder shall record and investigate the exceedance of any descriptive or numerical limit or target specified in any part of section 2 of this Licence.

2.2 Point source emissions to surface water

- 2.2.1 The Licence Holder shall ensure that where waste is emitted to surface water from the emission points in Table 2.3.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 2.3.1: Emission points to surface water		
Emission point reference and location on Map of emission points	Description	Source including abatement
SW1-SW15	Discharge pipe into Geraldton Harbour	Stormwater runoff No abatement specified

2.3 Fugitive emissions

- 2.3.1 The Licence Holder shall ensure that reasonable and practicable measures are taken to ensure that dust generated on the premises (excluding dust from Shiploading Events or Metal Concentrate handling) does not cross the premises boundary.

2.4 Odour

- 2.4.1 The Licence Holder shall 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.

3 Monitoring

3.1 General monitoring

- 3.1.1 The Licence Holder shall ensure that all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.
- 3.1.2 The Licence Holder shall ensure that annual monitoring is undertaken in each calendar year prior to 30 June.
- 3.1.3 The Licence Holder shall 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.
- 3.1.4 The Licence Holder shall, 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.

3.2 Ambient environmental quality monitoring

3.2.1 The Licence Holder shall undertake the monitoring in Table 3.2.1 according to the specifications in that table, and record and investigate results that do not meet any target specified in that table.

Table 3.2.1: Monitoring of ambient air quality							
Monitoring point reference and location (as shown in schedule 1)	Parameter	Limit	Target	Units ¹	Averaging period	Frequency ²	Method
Berth 1; Lemmon Road; Port Way; Connell Road	Lead as TSP	0.5	-	µg/m³	3 month rolling average ³	Continuous during shiploading events	Mid West Ports Authority
Berth 1; Lemmon Road; Port Way; Connell Road	Copper as PM ₁₀	-	1.0	µg/m³	24 hours	Continuous during shiploading events	
	Nickel as TSP	-	0.14			Continuous during shiploading events	
	Manganese as PM ₁₀	-	-				
	Particulates as TSP	-	90				
	Particulates as PM ₁₀	-	50				
	Manganese as PM ₁₀	-	0.15	µg/m³	Annual Rolling Average	Continuous during shiploading events	Air Quality Sampling and Analysis Plan
Berth 1; Lemmon Road; Port Way	Lead as PM ₁₀	-	0.5	µg/m³	24 hours	Continuous during shiploading events	
Connell Road	Lead as PM ₁₀	-	2.0	µg/m³	24 hours	Continuous during shiploading events	

Note 1: All units are referenced to STP dry

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

Note 3: The three month rolling average is to be calculated using the methodology outlined in schedule 2.

3.2.2 The Licence Holder shall undertake the monitoring in Table 3.2.2, according to the specifications in that table, and record and investigate results that do not meet any target specified in that table.

Table 3.2.2: Monitoring of ambient sediment quality					
Monitoring point reference and location	Parameter	Limit	Units	Frequency	Method ¹
CS1, CS2, ORA1, ORA2, FBH1, FBH2, CH1, CH2, CH3, CH4, CH5, CH6, CH9, CH10, OF2, YM1, and TB1	Aluminium	Lowest value for the parameters of any guideline value stated in the ANZECC/ARMCANZ Guidelines (ISQG-Lows and ISQG-Highs) or Assessment Levels for Soil, Sediment and Water	mg/kg	Annually	Mid West Ports Authority Sediment Sampling and Analysis Plan Methodology outlined in EPA 2005 and ANZECC/ARMCANZ Guidelines.
	Arsenic				
	Cadmium				
	Copper				
	Lead				
	Mercury				
	Nickel				
	Zinc				
	Phosphate				
CS1, CS2, ORA1, ORA2, FBH1, FBH2, CH2, CH5, CH6, CH3, CH4, CH9 CH1, CH10, OF2, YM1, and TB1	Chromium	As per ANZG 95 % trigger values	mg/kg	Annually when Iron Concentrate has been loaded within that Annual Period.	Sediment pore water sampling
	Cobalt				
	Selenium				
	Vanadium				
CS1, CS2, ORA1, ORA2, FBH1, FBH2, CH2, CH5, CH6, CH3, CH4, CH9 CH1, CH10, OF2, YM1, and TB1	Polycyclic Aromatic Hydrocarbons (PAH)	Lowest value for the parameters of any guideline value stated in the ANZECC/ARMCANZ Guidelines (ISQG-Lows and ISQG-Highs) or Assessment Levels for Soil, Sediment and Water	mg/kg	Prior to 30 June in every second year	Mid West Ports Authority Sediment Sampling and Analysis Plan Methodology outlined in EPA 2005 and ANZECC/ARMCANZ Guidelines.
	Tributyltin (TBT)				
	Total Organic Carbon (TOC)				
	Particle Size Analysis (PSA)	-	%		

Note1: the median concentration from the sediment monitoring at each monitoring point for each parameter shall be compared with which ever values are the lowest in either the ANZECC/ARMCANZ Guidelines (ISQG-Lows and ISQG-Highs) or Assessment Levels for Soil, Sediment and Water.

3.2.3 The Licence Holder shall provide to the CEO an investigation report within six weeks of becoming aware of a limit exceedance for the parameters in Table 3.2.2.

3.2.4 The Licence Holder must monitor emissions:

- At the corresponding monitor location;
- For the corresponding parameter
- At the corresponding frequency;
- For the corresponding average period;
- In the corresponding unit; and
- Using the corresponding method,

As set out in Table 3.2.3

Table 3.2.3: Emissions and discharge monitoring					
Monitoring point reference and location	Parameter	Units	Frequency	Average period	Method
SW05a (Berth 2) or SW14 (Berth 6) as per Schedule 1: Maps	Nitrogen	mg/L	On campaign basis: (a) daily for the duration of the handling of fertilisers (b) 4 days after handling of fertiliser has been completed	Spot sample	AS5667.1 and AS5667.10
	Ammonia	mg/L			

3.2.5 The Licence Holder must monitor the surface water for concentrations of the parameters listed in Table 3.2.4

- (a) At the corresponding monitor location;
 - (b) In the corresponding unit;
 - (c) at no less than the corresponding frequency
 - (d) using the corresponding method,
- as set out in Table 3.2.4

Table 3.2.4: Monitoring of ambient marine quality					
Monitoring point reference and location	Parameter	Limit	Units	Frequency	Method
Fixed monitoring site near Berth 6 where iron concentrate is handled. Location to be determined	Total iron (unfiltered)	10 mg/L	mg/L	One campaign immediately before handling.	In-field measurements (via test kit)
				Daily during loading period.	

4 Information

4.1 Records

4.1.1 All information and records required by the Licence shall:

- (a) be legible;
- (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- (c) except for records listed in 4.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent Licence; and
- (d) for those following records, be retained until the expiry of the Licence and any subsequent Licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.

- 4.1.2 The Licence Holder shall ensure that:
- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
 - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 4.1.3 The Licence Holder shall complete an Annual Audit Compliance Report indicating the extent to which the Licence Holder has complied with the conditions of the Licence, and any previous Licence issued under Part V of the Act for the Premises for the previous annual period.
- 4.1.4 The Licence Holder shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

4.2 Reporting

- 4.2.1 The Licence Holder shall submit to the CEO an Annual Environmental Report within 64 calendar days after the end of the annual period. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form
-	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
1.3.7	Representative DEM level for each distinct manganese product handled in the Annual Period.	None specified
1.3.9	Moisture Content averaged over each shipment.	Non specified
1.3.10	Particle size distribution of each distinct manganese ore product (lump and fines)	None specified
Table 3.2.1	Ambient air quality monitoring and a comparison against specified target.	None specified
Table 3.2.2	Ambient sediment monitoring	None specified
Table 3.2.3	Stormwater monitoring	None specified
Table 3.2.4	Ambient marine quality monitoring	None specified
4.1.3	Compliance	Annual Audit Compliance Report (AACR)
4.1.4	Complaints summary	None specified

- 4.2.2 The Licence Holder shall ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and Licence limits and/or targets.
- 4.2.3 The Licence Holder shall submit the information in Table 4.2.2 to the CEO according to the specifications in that table.

Table 4.2.2: Non-annual reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form¹
-	Copies of original monitoring reports submitted to the Licence Holder by third parties	Not applicable	Within 14 days of the CEOs request	As received by the Licence Holder from third parties
Conditions 1.3.8; 1.3.9; and 1.3.10	Particle size distribution; DEM level (where applicable ²); and Moisture Content averaged over the first shipment of each distinct manganese ore product (lump and fines)	Not applicable	Within 30 days of the first shipment of each distinct manganese ore product (lump and fines)	None specified+
Table 3.2.1	Meteorological data and a description of all ship loading and unloading activities occurring the day before, day of and day after manganese loading.	Quarterly	Three months and then six months from the commencement of this Amendment notice	Tabulated
Table 3.2.1	Three month rolling average ambient air quality concentration for lead.	Quarterly	Within 30 days after the end of each quarterly period.	None specified
Table 3.2.1	Target exceedances	Quarterly	Within 30 days after the end of each quarterly period	ET1
Table 3.2.1	Lead, copper or nickel target exceedances	Not applicable	Within 7 days of becoming aware of exceedance	ET1 ³
Condition 3.2.2	Sediment sampling exceedances	Not applicable	Within six weeks of becoming aware of an exceedance	None specified

Note 1: Forms are in Schedule 3

Note 2: Where DEM cannot be determined for that distinct manganese ore product, evidence obtained in accordance with Condition 1.3.8 must be supplied.

Note 3: The report shall also include a summary of the Shiploading Events associated with the exceedances including the type and quantity of cargo loaded and the date and time of commencement and completion of loading. The report shall also include air quality data for all parameters detailed in Table 3.2.1 recorded during any Shiploading Event undertaken during the period of the exceedances.

4.3 Notification

4.3.1 The Licence Holder shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement¹	Format or form²
2.1.1	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
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution		

Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement¹	Format or form²
3.1.4	Calibration report	As soon as practicable	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

Note 2: Forms are in Schedule 3

Schedule 1: Maps

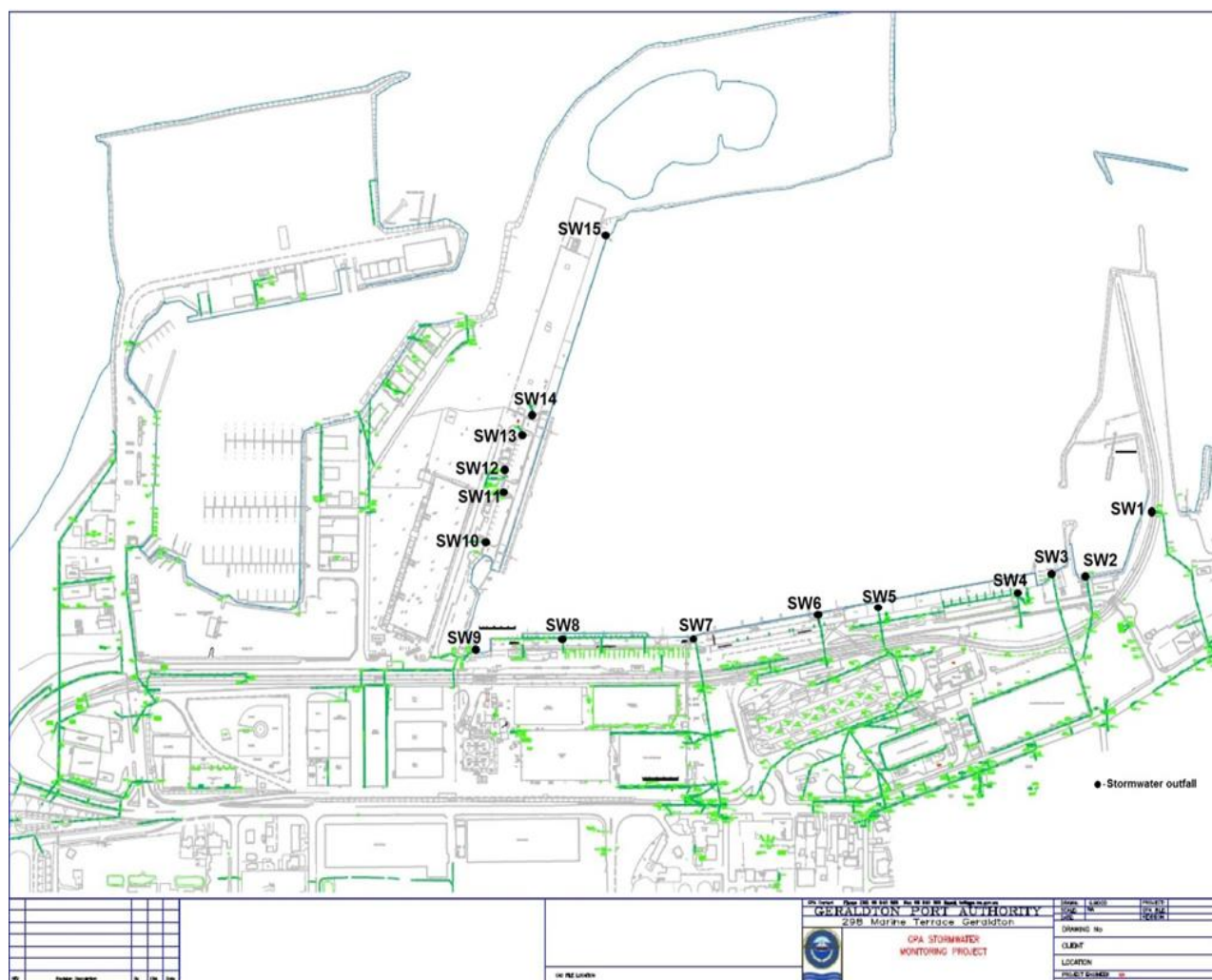
Premises map

The Premises are shown in the map below. The red line depicts the Premises boundary.



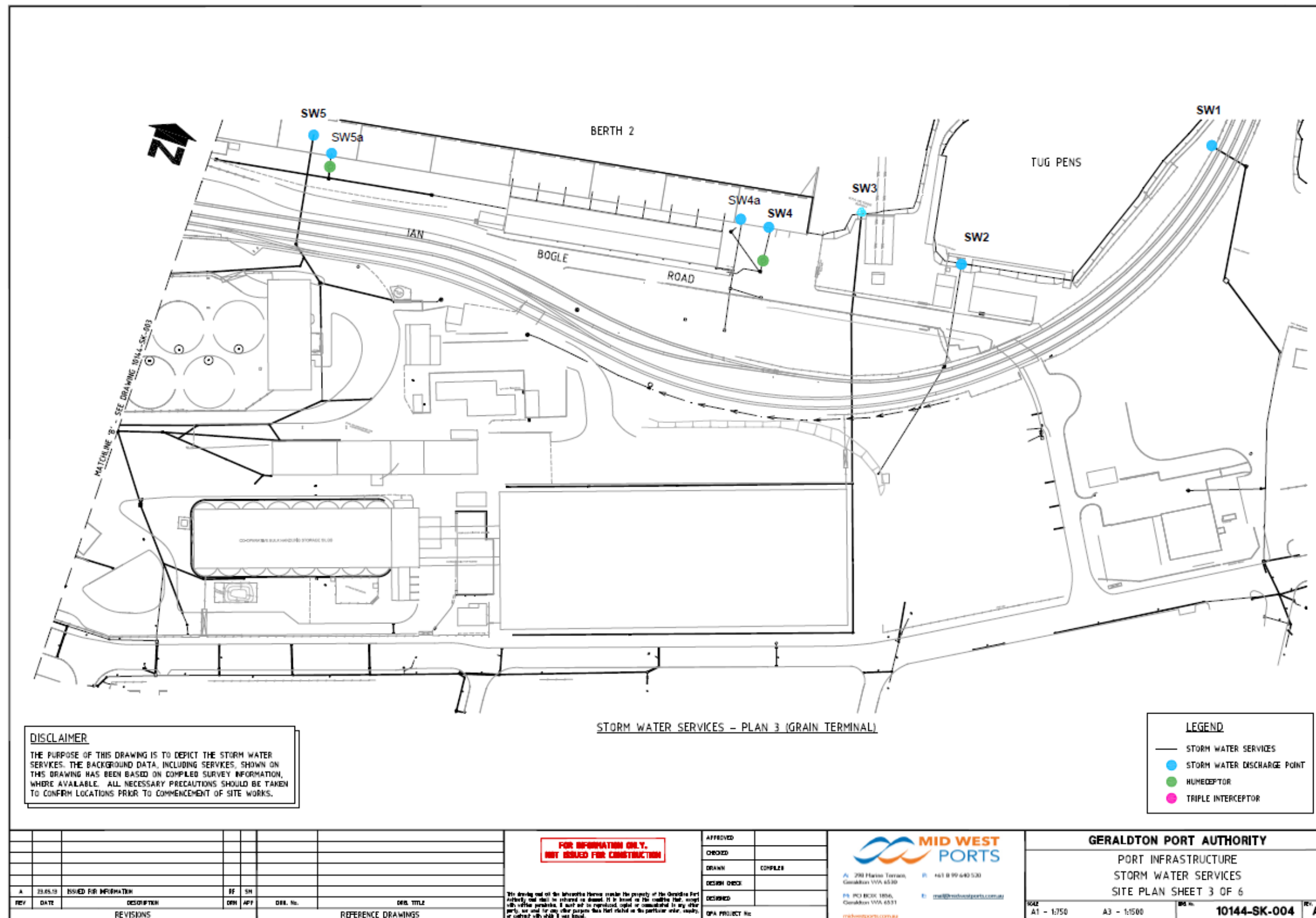
Map of emissions points

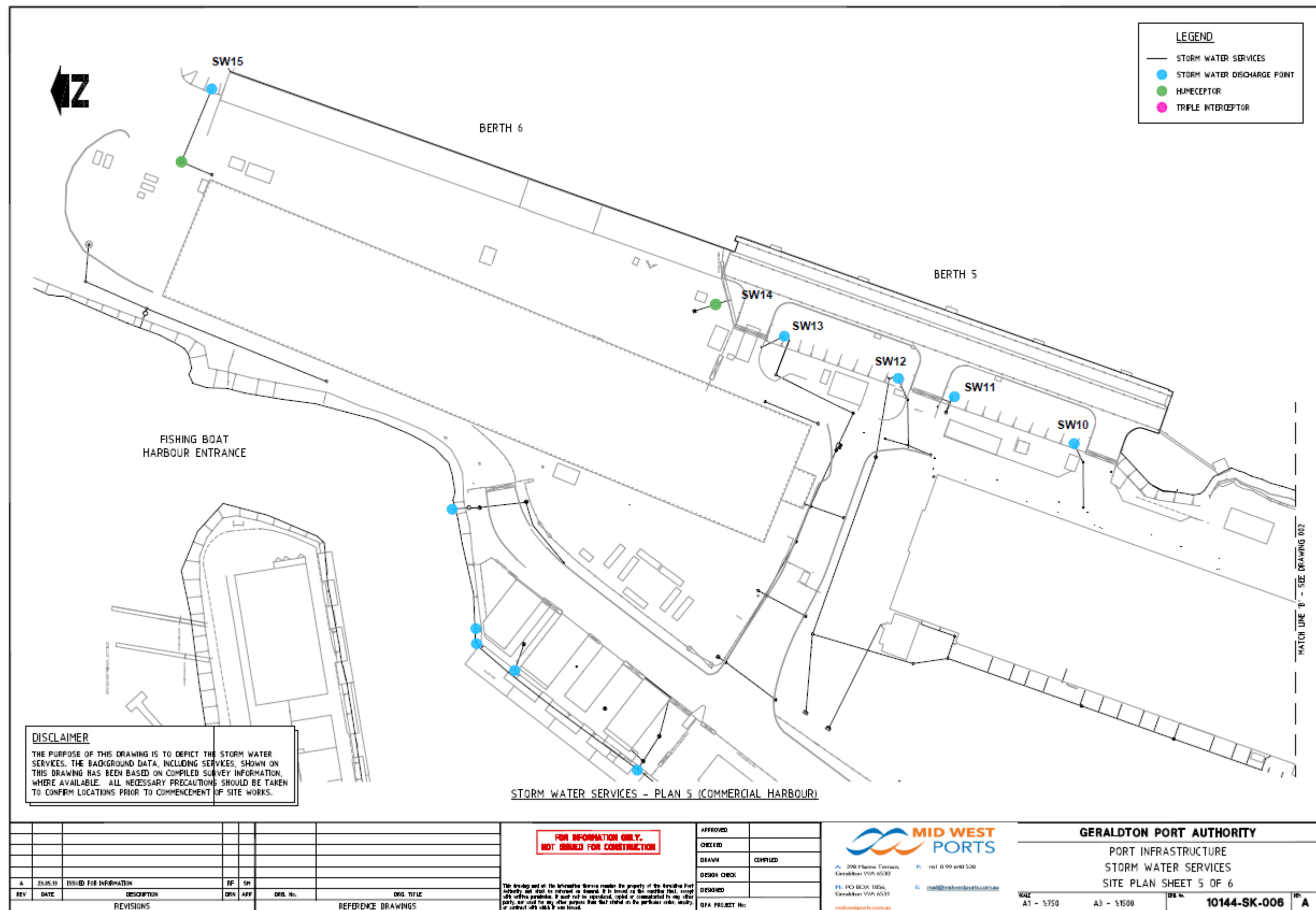
The locations of the emission points defined in Table 2.3.1 are shown below



Maps of stormwater infrastructure and sampling

The locations of the monitoring defined in Table 3.2.3 are shown below





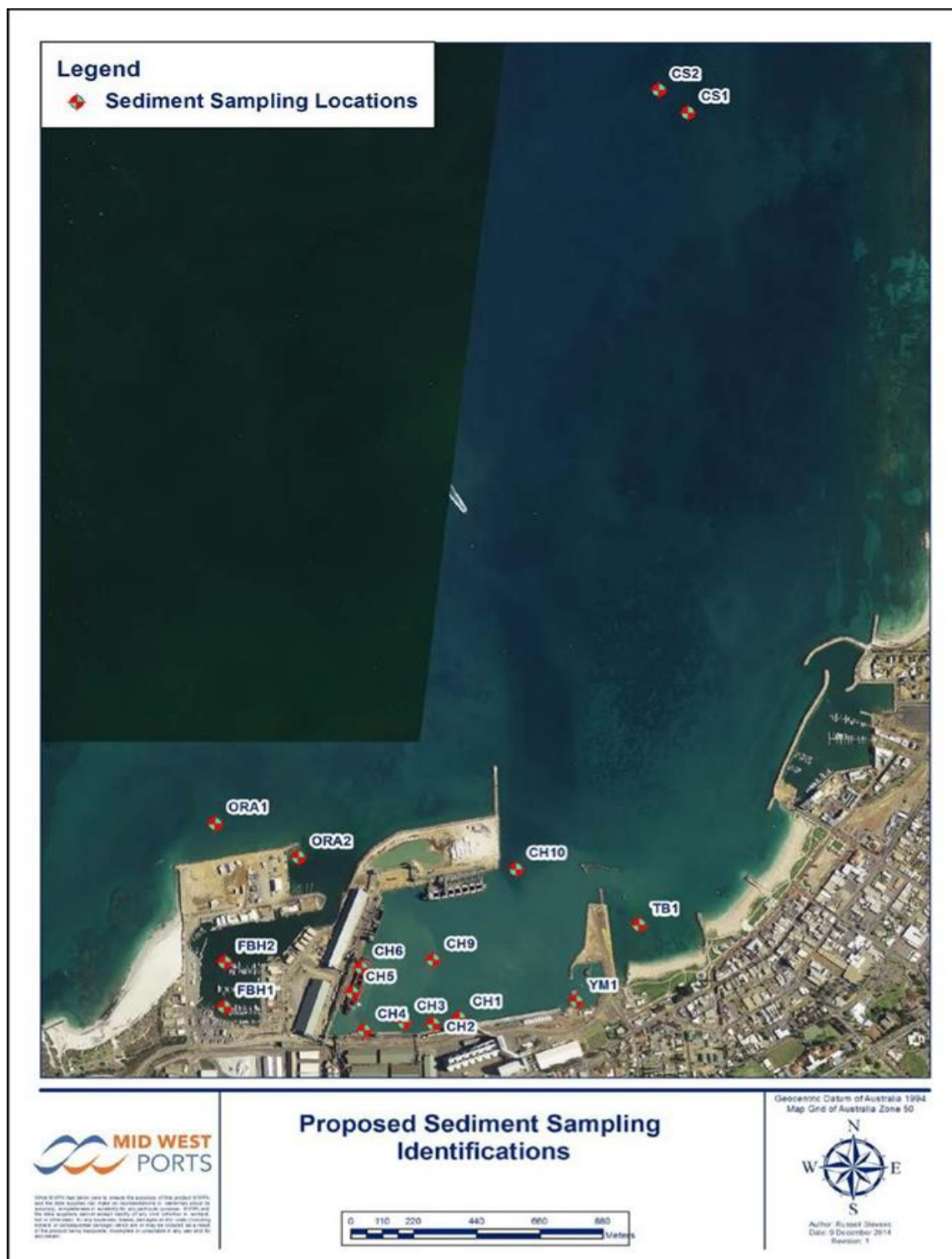
Map of monitoring locations

The locations of the monitoring points defined in Table 3.2.1 are shown below.



Map of monitoring locations

The locations of the monitoring points defined in Table 3.2.2 are shown below.



Schedule 2: Methodology

Three Month Rolling Average for Lead: Calculation

The following procedure will be used to calculate the 3 month rolling average ambient air quality for lead as TSP referred to in Table 3.2.1.

Sampling Regime:

Samples will be collected using HiVol samplers over a 24 hour period and are to be defined as either:

- (i) a "Concentrate Sample" – where loading of heavy metal concentrate occurs during the 24 hour monitoring period, or in the 24 hour period after the concentrate shipment has completed loading; or
- (ii) a "Background Sample" – sample that is not a Concentrate Sample.

Continuous sampling will be conducted during the loading of heavy metal concentrates and for the 24 hours after the concentrate shipment has completed loading.

A Background Sample will be collected every six days to obtain five samples per month. Where a scheduled background sample falls on a day where concentrate sampling is required an additional background sample should be collected to obtain a minimum of five background monitoring samples per month.

Monthly Averaging:

For each calendar month the average concentration of lead as TSP will be calculated using the following formula:

$$\frac{(A \times B) + C}{\text{No of Days in Month}}$$

Where:

A = The average concentration of lead as TSP calculated from all 24 hour Background Samples collected during the month.

B = The number of 24 hour periods in the month where concentrate sampling was not required.

C = The sum of all 24 hour Concentrate Samples of lead as TSP collected during the month.

Three Month Rolling Average:

The three month rolling average will be calculated for each month using the following formula:

$$\frac{\text{Monthly Average} + \sum \text{Previous 2 Monthly Average}}{3}$$

Schedule 3: Forms

ET1

Licence: L4275/1982/15
Authority

Licence Holder: Mid West Ports

Period:

Name: Target exceedances

Form ET1: Target exceedances

Please provide an analysis of the target exceedances for the month, including but not limited to the:

- (a) date, time and reason for the exceedance;
- (b) period over which the exceedance occurred; and
- (c) corrective action taken or planned to prevent a recurrence of the exceedance, if appropriate, including a timeline for implementation.

Signed on behalf of Mid West Ports Authority: Date:

Form: N1

Licence: L4275/1982/15
Form: N1

Licence Holder: Mid West Ports Authority
Date of breach:

Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.

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	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Notification requirements for any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution	
Date and time of event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken , or intended to be taken, to stop any emission	
Description of the failure or accident	

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 Mid West Ports Authority	
Date	