



**Licence Number:** L5099/1974/14

**Licence Holder:** Southern Ports Authority

**Business address:** Southern Ports Authority  
Level 4, 679 Murray St  
West Perth WA 6005

**Duration:** 07/04/2014 to 06/03/2032

**Issue Date:** 07/04/2014

**Amendment Date:** 24/01/2024

**Premises:** Port of Esperance  
The Esplanade and Bower Avenue  
ESPERANCE WA 6450

Part of Crown Reserve 28207  
Certificate of Title Volume 3127 Folio 354

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production or design capacity
Category 58 – Bulk material loading or unloading: Premises on which clinker, coal, or, ore concentrate or any other bulk granular material (other than salt) is loaded onto or unloaded from vessels by an open material loading system	100,000 tonnes per day
Category 58A – Bulk material loading or unloading: Premises on which salt is loaded onto or unloaded from vessels by an open materials loading system	100,000 tonnes per day
Category 82 – Boat building and maintenance: premises on which – (a) Vessels are commercially built or maintained; and (b) Organotin compounds are not used or removed from vessels.	Not applicable

This Licence Amendment is granted to the Licence Holder, subject to the following conditions, on 24 January 2024, by:

Melissa Chamberlain

**A/MANAGER, RESOURCE INDUSTRIES  
REGULATORY SERVICES**

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

## Licence history

Date	Reference number	Summary of changes
07/01/2009	L5099/1974/12	Licence re-issue
07/03/2011	L5099/1974/13	Licence re-issue
28/02/2014	L5099/1974/14	Licence re-issue
19/02/2015	L5099/1974/14	Change of name and addition of new noise monitoring conditions
3/10/2016	L5099/1974/14	Amendment Notice 1: Addition of spodumene handling and loading
25/11/2016	L5099/1974/14	Amendment Notice 2: Change to the Muscovite (mica) limit
20/07/2016	L5099/1974/14	Amendment Notice 3: Removal of spodumene handling expiry date
23/02/2018	L5099/1974/14	DWER initiated Licence Review
1/10/2018	L5099/1974/14	Licence amended following application to amend conditions of the Reviewed Licence, combined with amendment application to allow for bulk handling of nickel and copper concentrate.
22/10/2018	L5099/1974/14	Licence amended following application on behalf of Mineral Resources Limited (MRL) to authorize the operation of a hybrid car dumper for the in-loading of iron ore.
06/08/2019	L5099/1974/14	Amended Licence to give effect to the Minister's determination (024/18)
01/07/2020	L5099/1974/14	Licence amended to allow ongoing export of bulk spodumene across Berth 3.
2/11/2023	L5099/1974/14	Licence amendment for the following: <ul style="list-style-type: none"> <li>• increase of assessed volumes of imported fertiliser from 200 to 500 tpa;</li> <li>• removal of dust monitoring location "Site 5";</li> <li>• removal of infrastructure constructed under Table 2: "Works required for Premises";</li> <li>• changes to stormwater management at Berth 2 following construction of StormDMT (including decommissioning of H3);</li> <li>• changes to trial notification conditions to include handling method; and</li> <li>• minor administrative changes to fix errors and reflect updated licence template.</li> </ul>
24/01/2024	L5099/1974/14	Licence amended to remove 'Draft' watermark.

## Interpretation

In this Licence:

- (a) the words 'including', 'includes' and 'include' will be read as if followed by the words 'without limitation';
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline or code of practice in this Licence:
  - (i) if date, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time.
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act.
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

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

## Conditions

### Emissions

1. The Licence Holder must not cause any Emissions from the Primary Activities on the Premises except for Specified Emissions and General Emissions described in Column 1, subject to the exclusions, limitations or requirements specified in Column 2, of Table 1.

**Table 1: Authorised Emissions table**

Column 1	Column 2
Emission type	Exclusions/limitations/requirements
<b>Specified Emissions</b>	
Fugitive dust	Subject to compliance with conditions 10 to 28 inclusive.
Discharge of stormwater and industrial wash water related to Primary Activities.	Subject to compliance with conditions 10, 11 and 29 to 32 inclusive.
Noise	Subject to compliance with conditions 10 and 11.
Minor Spillage of iron ore, spodumene, fertilisers and/or sulfur from the bulk material loading of vessels.	Subject to compliance with condition 11.
<b>General Emissions (excluding Specified Emissions)</b>	
Emissions which arise from the Primary Activities set out in the General Description in Schedule 2.	<p>Emissions excluded from General Emissions are:</p> <ul style="list-style-type: none"> <li>• Unreasonable Emissions; or</li> <li>• Emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or</li> <li>• Discharges of Waste in circumstances likely to cause Pollution; or</li> <li>• Emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or</li> <li>• Emissions or Discharges which do not comply with an Approved Policy; or</li> <li>• Emissions or Discharges which do not comply with prescribed standard; or</li> <li>• Emissions or Discharges which do not comply with the Conditions in an Implementation Agreement or Decision; or</li> <li>• Emissions or Discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</li> </ul>

## Trial shipments

### Notification of a Trial

2. The Licence Holder must notify the CEO of a Trial and such notification (which the CEO will make publicly available) must:
  - (a) be in writing;
  - (b) be made 30 calendar days or more prior to the Trial Commencement Date;
  - (c) include details of the nature of the Trial, including whether the Trial is for:
    - (i) the loading or unloading of a bulk granular material, not specified in Table 10 Schedule 2 of this licence, at the premises; or
    - (ii) the loading or unloading of a bulk granular material, specified in Table 10 Schedule 2 of this licence, at the premises using a handling method not specified by any other condition of this licence; or
    - (iii) the loading or unloading of a new bulk granular material, not specified in Table 10 Schedule 2 of this licence, at the premises using a handling method not specified by any other condition in this licence;
  - (d) include details of the extent of the Trial, including:
    - (i) the duration and frequency of any loading or unloading activities;
    - (ii) method for materials storage and handling including any changes to infrastructure and equipment used at the Premises; and
    - (iii) all controls to be implemented for the management of emissions and discharges;
  - (e) include details of the nature of bulk granular material, including:
    - (i) all human health and ecosystem hazards;
    - (ii) the chemical and geochemical composition;
    - (iii) particle size distribution of bulk granular material including inhalable and respirable fractions;
    - (iv) the representative DEM level, where determination of DEM is possible for that material; and
    - (v) leachate testing conducted on materials that may present a toxicological or ecotoxicological risk;
  - (f) include an analysis of risk to human health and the environment from potential discharges, dust, odour and noise emissions associated with the Trial;
  - (g) include a monitoring plan that includes, but is not limited to:
    - (i) the indicator parameter/s to be monitored;
    - (ii) monitoring locations, equipment used and proximity to sensitive receptors;
    - (iii) monitoring frequencies;
    - (iv) monitoring averaging periods; and
    - (v) any meteorological monitoring to be undertaken; and
  - (h) only when a CEO notification to cease a Trial has been issued in accordance with Condition 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 2(a) – (g);
    - (ii) address the issues that resulted in the notification to cease the Trial on the initial (or any subsequent) Trial for the same product; and

- (iii) include a new Trial end date calculated 12 months from the commencement of the first shipment of the ceased Trial, not including time elapsed between the CEO notification to cease that Trial and the Trial amendment notification.

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

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

Nothing in this Condition prevents the Licence Holder subsequently submitting an amendment in relation to the Trial. Any Trial amendment proposed by the licence holder must follow the notification requirements as per Condition 2(h).

### Trial restrictions

4. Product received for the purpose of a trial must only be stored on the premises prior to the commencement of the first shipment for a maximum period of:
  - (a) six weeks when being stored outside of enclosed infrastructure; or
  - (b) three months when being stored inside enclosed infrastructure.
5. The Trial must cease:
  - (a) 12 months from the date of the commencement of the first shipment unless otherwise extended in writing by the CEO; or
  - (b) immediately after the shipment where the cumulative throughput amounts of Trial material exceed 1 million tonnes; or
  - (c) immediately upon receipt of a CEO notification to cease a Trial in accordance with Condition 3, whichever occurs first and may only recommence upon notification of a Trial amendment, in accordance with Condition 2(g).
6. The Licence Holder must not Trial the bulk handling of materials that:
  - (a) Contain asbestos in concentrations equal to or greater than 0.01% w/w for non-friable asbestos or 0.01% w/w for fibrous asbestos;
  - (b) Contain respirable silica equal to or greater than 1% w/w;
  - (c) Exceed the radiation transport limit of 10 Bq/g for Uranium-238 and Thorium-232 combined;
  - (d) Exceed Rubidium-87 concentrations of 30 Bq/g; or
  - (e) Are classified as tailings, construction or demolition waste, or hazardous waste.

## Reporting

7. The Licence Holder must submit a report to the CEO which includes the results of monitoring required by condition 2(g), and includes:
  - (a) the 15-minute averaged, raw data in tabulated format;
  - (b) a graphical representation of the monitoring results for each Trial shipment with a comparison against 15-minute averaged meteorological (wind speed and direction) monitoring data;
  - (c) Moisture Content data averaged over each Trial shipment and showing a comparison against the representative DEM level, where the DEM level can be determined; and
  - (d) a summary of the effectiveness of the controls implemented for the management of emissions and discharges;
 within 30 days of the completion of the first Trial shipment; at four, seven and 10 months from the first Trial shipment; and a final closeout report within 30 days following the cessation of the Trial.
8. The licence holder must record the date 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 by condition 7.

## Ongoing shipments and handling

9. In the event that approval is sought for the ongoing shipments of the Trial material or for the ongoing use of the Trial material handling method, the Licence Holder must provide an application for Licence amendment or works approval, along with a report fulfilling the requirements of Condition 7, at least three months prior to the completion of the Trial period.

## Maintenance and operation requirements

10. The Licence Holder must ensure that the infrastructure and equipment named and described in Column 1 and Column 2 of Table 11 in Schedule 3, is adequately maintained in good working order to ensure it can be operated in accordance with the requirements specified in Column 3 of Table 11 in Schedule 3.

## Product restrictions and management

11. The Licence Holder must only load or unload bulk granular material specified in Column 1 of Table 10 in Schedule 2 at the Premises unless doing so in accordance with the requirements of Conditions 2 to 9.

## Nickel and copper concentrate acceptance and monitoring

12. The Licence Holder must only accept nickel concentrate and copper concentrate at the Premises that contains a Moisture Content at or above the DEM level derived from application of AS4156.6-2000 for a representative sample.
13. The Licence Holder must not handle in bulk any nickel concentrate containing nickel subsulfide ( $\text{Ni}_3\text{S}_2$ ) as determined from a representative sample.
14. For the purposes of Conditions 12 and 13, a representative sample is to be determined in accordance with Table 2.

**Table 2: Nickel concentrate and copper concentrate – representative sampling methodology**

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Material	Location	Parameter	Averaging period	Frequency	Method
Copper concentrate Nickel concentrate	Mine Site	Moisture Content	A representative sample of at least one consignment or truck load from the mine site is to be taken.  The representative sample is to be taken prior to departure from the mine site.	Weekly	AS1289.2.1.1-2005 undertaken by onsite laboratory with technical results in a written monthly report.
Nickel concentrate	Mine site	Nickel subsulfide (Ni <sub>3</sub> S <sub>2</sub> ) Nickel disulfide (NiS <sub>2</sub> ) Respirable Silica	A representative blended sample of the nickel concentrate.  A representative sample is a blended composite sample (of at least two subsamples) from one week's production of nickel.	Annually	Onsite laboratory using clearly documented methodology.  Reputable Laboratory validating methodology and technical results provided on an annual basis in a written report.

15. The Licence Holder must ensure that the moisture level of the nickel concentrate and copper remains at or above the DEM level prior to and during ship loading.
16. The Licence Holder must, upon Department Request, appropriately sample the nickel concentrate and copper concentrate and undertake moisture analysis with results supplied to CEO to confirm compliance with Condition 15.
17. The Licence Holder must ensure that no xanthate odours cross the Premises boundary.

### Spodumene acceptance and monitoring

18. The Licence Holder must only accept bulk spodumene concentrate at the Premises which meets the following specifications:
  - (a) contains a Moisture Content at or above the DEM level derived from application of AS4156.6-2000;
  - (a) the proportion of muscovite contained within a representative sample of the spodumene is at or below 5% by weight;
  - (b) the proportion of respirable silica quartz (analysis includes % particulates <10 µm) contained within a representative sample of the spodumene is at or below 1% by weight; and
  - (c) spodumene handled across Berth 3 must contain <3% fines (<10µm)

For the purposes of this condition, a representative sample for all Distinct Bulk Spodumene Concentrate for Moisture Content, muscovite and respirable silica quartz, is determined in accordance with Table 3 below.



**Table 3: Spodumene – representative sampling methodology**

Column 1	Column 2	Column 3	Column 4	Column 5
Location	Parameter	Averaging Period	Frequency	Method
Mine Site	Muscovite (mica)	12 hourly representative sample (A representative sample is a composite sample comprised of samples taken every two hours over a 12 hour period)	Weekly	Onsite laboratory using clearly documented methodology.  Reputable Laboratory validating methodology and technical results provided on a monthly basis in a written report.
Mine Site	Moisture Content	12 hourly representative sample (A representative sample is a composite sample comprised of samples taken every two hours over a 12 hour period)	Weekly	AS1289.2.1.1-2005 undertaken by onsite laboratory with technical results in a written monthly report.
Mine Site	Respirable silica quartz	Representative sample (A representative sample is a composite sample comprised of sample taken every two hours over seven days)	Quarterly	Onsite laboratory using clearly documented methodology.  Reputable Laboratory validating methodology and technical results provided on a quarterly basis in a written report.

19. The Licence Holder must ensure that the moisture level of the spodumene remains at or above the DEM level prior to and during ship loading.
20. The Licence Holder must, upon Department Request, appropriately sample the spodumene and undertake moisture analysis with results supplied to CEO to confirm compliance with Condition 19.
21. The Licence Holder must on an annual basis, review any previous reports or submission made to the CEO on the physical or mineralogical properties of each Distinct Bulk Spodumene Concentrate and undertake an assessment on whether any changes result in an increase to public health, amenity or the environment.

#### Iron ore acceptance and monitoring

22. The Licence Holder must only accept bulk iron ore to the Premises, if it contains a Moisture Content at or above the DEM level.
23. The Licence Holder must receive and maintain accurate and auditable records from each Premises User in relation to:
  - (a) the Moisture Content for all iron ore sampled at the mine site by the mining company and received at the Premises; and
  - (b) documentation of the DEM Level for all iron ore material from each source determined by a laboratory on at least an annual basis.
24. For the purpose of conditions 22 and 23, a representative sample for all bulk iron ore material for Moisture Content is determined in accordance with Table 4 below.

**Table 4: Iron Ore - representative sampling methodology**

Column 1	Column 2	Column 3	Column 4	Column 5
Location	Parameter	Averaging Period	Frequency	Method
Mine Site	Moisture Content	12 hourly representative sample (A representative sample is a composite sample comprised of samples taken every two hours over a 12 hour period)	At least one sample per train	ISO3087:2011; or ATS5621-2013; or ISO4299:1989; or alternative method approved by the CEO

25. The Licence Holder must operate water sprays at the Berth 3 ship loader for the duration of loading where dust is visibly escaping the ship's hold.

### Ambient air quality monitoring

26. The Licence Holder must undertake ambient air quality monitoring:

- at the locations specified in Column 1;
- for the parameters specified in Column 2;
- at the averaging periods specified in Column 3;
- at the frequencies specified in Column 6;
- in accordance with the methods specified in Column 7; and
- for the period specified in Column 8,

in Table 5.

**Table 5: Ambient air quality monitoring**

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Location	Parameter	Averaging period	Limit	Reportable Event	Frequency	Method	Monitoring period
Sites 1 – 4 depicted in Figure 2 in Schedule 4	Particles as PM <sub>10</sub> (µg/m <sup>3</sup> )	24 hour average (midnight to midnight and midday to midday)	N/A	> 50 µg/m <sup>3</sup>	Continuous	AS 3580.1.1-2016 AS 3580.9.11-2016	For the duration of the Licence
Sites 1 – 4, depicted in Figure 2 in Schedule 4	Iron (µg/m <sup>3</sup> ) as PM <sub>10</sub> using HVAS	24 hour average (midday to midday)	N/A	N/A	One 24 hour sample every sixth day.	AS3580.9.6; and USEPA IO-3.4	For the duration of the Licence
	Nickel (µg/m <sup>3</sup> ) as PM <sub>10</sub> using HVAS	24 hour average (midday to midday)	0.14 µg/m <sup>3</sup>	N/A	One 24 hour sample every day during each shipment of bulk nickel concentrates; and every sixth day outside of bulk nickel	AS3580.9.6; and USEPA IO-3.4	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Location	Parameter	Averaging period	Limit	Reportable Event	Frequency	Method	Monitoring period
					loading periods.		
	Copper ( $\mu\text{g}/\text{m}^3$ ) as $\text{PM}_{10}$ using HVAS	24 hour average (midday to midday)	1.0 $\mu\text{g}/\text{m}^3$	N/A	One 24 hour sample every day during each shipment of bulk copper concentrates; and every sixth day outside of bulk copper loading periods.	AS3580.9.6; and USEPA IO-3.4	
	Lithium ( $\mu\text{g}/\text{m}^3$ ) as $\text{PM}_{10}$ using HVAS	24 hour average (midday to midday)	N/A	N/A	One 24 hour sample every sixth day.	AS3580.9.3; and USEPA IO-3.4	

27. The Licence Holder must notify the CEO of any Limit exceedance (as specified in Column 4 of Table 5 above) within 24 hours of the Limit exceedance having been identified, with a follow-up report containing the information specified in Schedule 4, within 7 days following the notification date.
28. The Licence Holder must provide a report to the CEO of any Reportable Events (as specified in Column 5 of Table 5 above) within 30 days of the Reportable Event having occurred, containing the information specified in Schedule 4.

### Stormwater and industrial wash water management and monitoring

29. Unless all containers are stored within the Storm DMT Filter System Catchment Area, as depicted in Schedule 1, the Licence Holder must:
- ensure that no discharges to the Esperance Harbour occur from the Black Swan Shed Pad depicted in Schedule 1 during copper concentrate loading operations;
  - remove sediment and water trapped in the Black Swan Shed Pad sump and Hume Interceptors 2 and 4, as depicted in Schedule 1, prior to any copper concentrate shipment and following the washdown of Berth 2 for each copper concentrate shipment.
30. The Licence Holder must maintain a log of the date and times that:
- Hume Interceptors 2 and 4 are emptied of washdown water and sediment; and
  - ships used for the export of copper concentrate are docked at Berth 2.
31. In the event of a copper concentrate spill at Berth 2, the Licence Holder must close the StormDMT filter system discharge valve immediately after the spill. The Storm DMT Filter System discharge valve must not be reopened until dissolved copper concentrations are confirmed to be below 10 mg/L:

- (a) as demonstrated from a sample collected from the first flush chamber;
- (b) after Berth 2 washdown; and
- (c) in accordance with AS 5667.1-1998 and AS 5667.10-1998.

**32.** The Licence Holder must undertake stormwater and industrial wash water monitoring:

- (a) at the locations specified in Column 1;
  - (b) the parameters specified in Column 2;
  - (c) for the averaging period specified in Column 3;
  - (d) at the frequencies specified in Column 4; and
  - (e) in accordance with the methods specified in Column 5
- in Table 6.

**Table 6: Stormwater and wash water discharge monitoring table**

Column 1 Locations	Column 2 Parameters	Column 3 Averaging Period	Column 4 Frequency	Column 5 Method
Hume Interceptor: H1 and H2 depicted in Figure 3 in Schedule 4.	pH <sup>1</sup> TSS (mg/L) TDS (mg/L) Lithium (mg/L) Nickel (mg/L) Copper (mg/L) Total Nitrogen (mg/L) Total Phosphorous (mg/L) Sulfur (mg/L)	Spot sample	Hume Interceptors: Monthly	AS 5667.1-1998 and AS 5667.10-1998
Hume Interceptor: H4 and Storm DMT system: First Flush Tank (FFT) and Filter System depicted in Figure 3 in Schedule 4.	pH <sup>1</sup> TSS (mg/L) TDS (mg/L) Lithium (mg/L) Copper (mg/L) Nickel (mg/L) Total Nitrogen (mg/L) Total Phosphorous (mg/L) Sulfur (mg/L)	Spot sample	Hume Interceptor 4: Monthly StormDMT system – First Flush Tank (FFT): Monthly	AS 5667.1-1998 and AS 5667.10-1998
Stormwater outlets: SW1, SW2 and SW3 depicted in Figure 3 in Schedule 4.	pH <sup>1</sup> TSS (mg/L) TDS (mg/L) Lithium (mg/L) Nickel (mg/L) Copper (mg/L) Total Nitrogen (mg/L) Total Phosphorous (mg/L) Sulfur (mg/L)	Spot sample	Monthly when flowing during Normal Business Hours	AS 5667.1-1998 and AS 5667.10-1998
MWTP and Sulfur circuit – post treatment wastewater	pH <sup>1</sup> TSS (mg/L) TDS (mg/L) Lithium (mg/L) Nickel (mg/L) Copper (mg/L) Total Nitrogen (mg/L) Total Phosphorous (mg/L) Sulfur (mg/L)	Spot sample	Monthly during discharges to the Reclaim Area.	AS 5667.1-1998 and AS 5667.10-1998

Note 1: In-field non-NATA accredited analysis permitted.

## Meteorological monitoring

**33.** The Licence Holder must undertake meteorological monitoring:

- (a) from the location specified in Column 1;

- (b) for the parameters specified in Column 2;
  - (c) at the height specified in Column 3; and
  - (d) in accordance with the method specified in Column 4;
- in Table 7.

**Table 7: Meteorological monitoring table**

Column 1	Column 2	Column 3	Column 4
Location	Parameter	Height (m)	Method
EP7 depicted in Figure 2 in Schedule 4.	Wind speed (m/s)	10	AS 3580.14-2014
	Wind direction (Degrees)	10	
	Rainfall (mm)	>0.3 above ground level	

## Information

- 34.** The Licence Holder must maintain accurate and auditable records for 3 years in relation to:
- (a) the calculation of fees payable in respect of this Licence;
  - (b) the works conducted in accordance with condition 8 of this Licence;
  - (c) monitoring required by conditions 14, 16, 18, 24, 26, 32 and 33 of this Licence;
  - (d) Limit exceedances reported in accordance with condition 27 of this Licence;
  - (e) Reportable Events reported in accordance with condition 28 of this Licence;
  - (f) Maintenance and/or inspection logs in accordance with Column 3 of Table 11 in Schedule 3;
  - (g) complaints received under condition 35 of this Licence; and
  - (h) any Waste from boat maintenance activities disposed of to a licensed landfill in accordance with Table 11 in Schedule 3.
- 35.** The Licence Holder must record the number and details of any complaints received by the Licence Holder relating to the Premises, and any action taken by the Licence Holder in response to the complaint. Details of complaints must include:
- (a) an accurate record of the concerns or issues raised, for example a copy of any written complaint or a written note of any verbal complaints made;
  - (b) the name and contact details of the complainant, if provided by the complainant;
  - (c) the date of the complaint; and
  - (d) the details and dates of the actions taken by the Licence Holder in response to the complaints.
- 36.** The Licence Holder must submit to the CEO within 90 days after the Anniversary Date, a Compliance Report indicating the extent to which the Licence Holder has complied with the Conditions in this Licence for the Annual Period and, as a minimum, containing the following information:
- (a) amount and type of materials specified in Column 1 of Table 10 in Schedule 2;
  - (b) monitoring data (including calibration reports) for the Annual Period required by conditions 14, 16, 18, 24, 26, 32 and 33 graphical or tabulated format;

- (c) copies of the reports for representative samples specified in Table 2 and Table 3;
  - (d) a summary of Reportable Events and Limit exceedances;
  - (e) a summary of complaints received under Condition 35;
  - (f) logbook records of emptying Hume interceptors and the Storm DMT Filter System including the reason for emptying and the volume removed; and
  - (g) logbook records of wet sweeping conducted on sealed areas on berths.
- 37.** The Licence Holder must comply with a Department Request within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.

## Definitions

In this Licence, the terms in Table 8 have the meanings defined.

**Table 8: Definitions**

Term	Definitions
Anniversary Date	means 30 September of each year.
Annual Period	means a 12 month period commencing from 1 October until 30 September in the following year.
Approved Policy	has the same meaning given to that term under the EP Act.
AS 1289.2.1.1-2005	means the Australian Standard AS 1289.2.1.1-2005 <i>Methods of testing soils for engineering purposes – Soil moisture content tests – Determination of the moisture content of a soil – Oven drying method (standard method)</i> .
AS 3580.1.1-2016	means the Australian Standard AS 3580.1.1 <i>Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment</i> .
AS3580.9.6.	means the Australian Standard AS3580.9.6 <i>Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM10 high volume sampler with size selective inlet - Gravimetric method</i>
AS3580.9.11-2016	means the Australian Standard AS 3580.9.11 <i>Methods for sampling and analysis of ambient air – Method 9.11: Determination of suspended particulate matter—PM<sub>10</sub> beta attenuation monitors</i> .
AS 3580.14-2014	means the Australian Standard AS 3580.14 <i>Methods for sampling and analysis of ambient air – Meteorological monitoring for ambient air quality monitoring applications</i> .
AS 4156.6-2000	means the Australian Standard AS 4156.6 <i>Coal preparation, Part 6: Determination of Dust/moisture Relationship for Coal</i> .
AS 5667.1-1998	means the Australian Standard AS 5667.1 <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i> .
AS 5667.10-1998	means the Australian Standard AS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</i> .
Assigned levels	means the noise level that applies to the premises according to the <i>Environmental Protection (Noise) Regulations 1987</i>
BAM	means Beta Attenuation Monitor

CEO	for the purposes of notification means:  Chief Executive Officer Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square Perth WA 6850 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
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.
Condition	means a condition to which this Licence is subject under section 62 of the EP Act.
Construction or demolition waste	as defined by the <i>Landfill Waste Classification and Waste Definitions 1996 (as amended April 2018)</i> .
Continuous	means a data recovery rate of at least 90%, excluding times where equipment is removed from site for the purposes of calibration.
DEM	means the dust extinction moisture number the moisture content of the material at which the Dust Number is 10 derived from the Australian Standard AS 4156.6-2000.
Department Request	means a request made by the CEO or Inspector to the Licence Holder in writing, sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to:  (a) information, records or reports in relation to specific matters in connection with this Licence including in relation to compliance with any Conditions and the calculation of fees (whether or not a breach of condition or the EP Act is suspected); or (b) reporting, records or administrative matters: (i) which apply to all Licences granted under the EP Act; or (ii) which apply to specified categories of Licences within which this Licence falls.
Discharge	has the same meaning given to that term under the EP Act.
Distinct Bulk Spodumene Concentrate	means any lump, fines or blended spodumene product with distinct physical and/or mineralogical characteristics that differ from another spodumene product.
Emission	has the same meaning given to that term under the EP Act.
Environmental Harm	has the same meaning given to that term under the EP Act.
EP Act	means the <i>Environmental Protection Act 1986 (WA)</i> .
EP Regulations	means the <i>Environmental Protection Regulations 1987 (WA)</i> .
General Description	means the description of activities and operations carried out on the Premises as set out in Schedule 2 of this Licence.
General Emission	has the meaning set out in Condition 1 of this Licence.
Hazardous waste	as defined by the <i>Landfill Waste Classification and Waste Definitions 1996 (as amended April 2018)</i> .



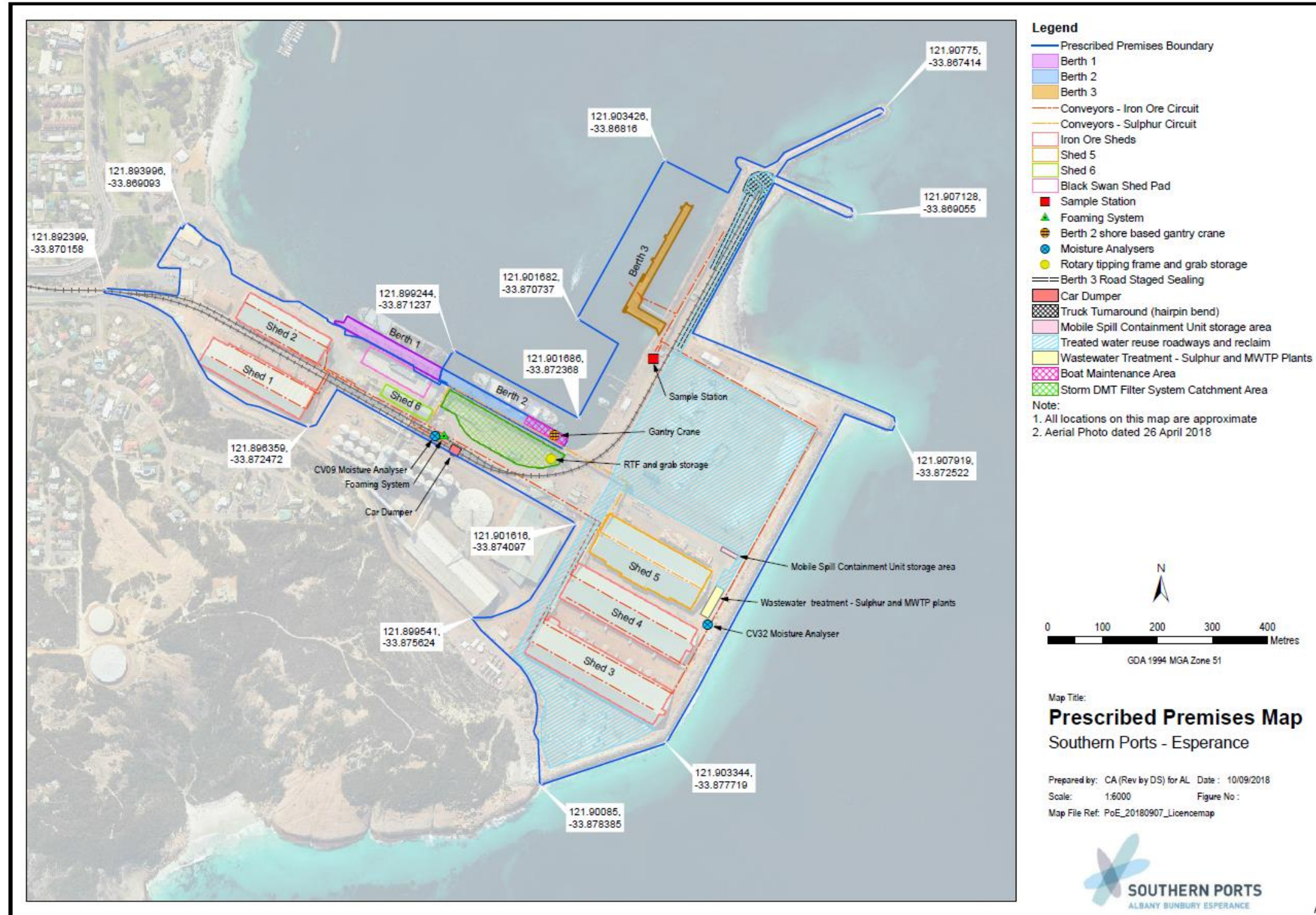
HVA	means High Volume Air Sampler Monitor
Implementation Agreement or Decision	has the same meaning given to that term under the EP Act.
Inspector	means an inspector appointed by the CEO in accordance with section 88 of the EP Act.
ISO3087-2011	means International Standardization Organization ISO3087:2011 <i>Iron ores – Determination of the moisture content of a lot.</i>
Licence	refers to this document, which evidences the grant of Licence by the CEO under section 57 of the EP Act, subject to the Conditions.
Licence Holder	refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence.
Limit exceedance	means an exceedance of the criteria specified in Column 4 of Table 6.
Material Environmental Harm	has the same meaning given to that term under the EP Act.
Moisture Content	means the ratio of the mass of water in a sample to the mass of solids in the sample, expressed as a percentage.
Minor Spillage	means spillage of material or substance that is trivial or negligible in nature and does not result in an Unreasonable Emission, Pollution, Material Environmental Harm or Serious Environmental Harm.
Normal Business Hours	means 0800 to 1700 hours, Monday to Friday excluding public holidays in Western Australia.
PM <sub>10</sub>	refers to particulate matter that is equal to, or smaller than 10µm in diameter.
Pollution	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Licence applies, as specified at the front of this Licence and as shown on the map in Schedule 1 to this Licence.
Reclaim Area	means the area depicted in Schedule 1 as the “Treated water reuse roadways and reclaim”.
Reportable Event	means an exceedance of the criteria specified in Column 5 of Table 6.
Reputable Laboratory	means a laboratory that is accredited by the National Association of Testing Authorities, Australia (NATA)
Primary Activities	refer to the activities on the front of this Licence and the description provided in Schedule 2 of this Licence.
Sealed	means any seal including concrete paving, bitumen, or bitumen-based seal that is resistant to heavy vehicle traffic.
Serious	has the same meaning given to that term under the EP Act.

Environmental Harm	
Specified Emission	has the meaning set out in Condition 1 of this Licence.
SWTP	means the Sulfur Water Treatment Pond depicted in Schedule 4.
TDS	means Total Dissolved Solids.
TEOM	means Tapered Element Oscillating Microbalances Monitors
Trial	<p>means a test period during which the Licence Holder:</p> <ul style="list-style-type: none"> <li>(a) loads or unloads a new bulk granular material, not specified in Table 10 Schedule 2 of this Licence, at the Premises; or</li> <li>(b) loads or unloads a bulk granular material, specified in Table 10 Schedule 2 of this licence, at the premises using a handling method not specified by any other condition of this licence; or</li> <li>(c) loads or unloads a new bulk granular material, not specified in Table 10 Schedule 2 or this licence, at the premises using a handling method not specified by any other condition of this licence,</li> </ul> <p>in accordance with Conditions 2 to 9 inclusive.</p>
Trial commencement date	in relation to the trial of a new granular bulk material means the date which the premises receives the new material on site. In relation to a trial for a new handling method, means the date the new handling method commences.
TSP	means Total Suspended Particulates.
TSS	means Total Suspended Solids.
Unreasonable Emission	has the same meaning given to that term under the EP Act.
USEPA	means United States (of America) Environmental Protection Agency.
USEPA IO-3.4	means Compendium Method IO-3.4 Determination of Metals in Ambient Particulate Matter Using Inductively Coupled Plasma (ICP) Spectroscopy.
Waste	has the same meaning given to that term under the EP Act.

## Schedule 1: Maps

### Premises map

The Premises and site infrastructure are shown in Figure 1 below. The blue line depicts the boundary to the Premises.



## Schedule 2: General description

### Infrastructure and equipment

The following Primary Activity infrastructure and equipment specified in Table 9 are situated on the Premises.

**Table 9: Primary Activity infrastructure and equipment**

	Infrastructure and equipment	Plan reference
<b>Category 58/58A: Bulk material loading or unloading</b>		
1.	Berth 2 – Nickel concentrate, copper concentrate, fertiliser, sulfur, spodumene	Premises map: Berth 2
2.	Berth 3 – Iron Ore and spodumene	Premises map: Berth 3
3.	Black Swan Shed Pad	Premises map: Black Swan Shed Pad
4.	Shed 1 – Iron Ore	Premises map: Shed 1
5.	Shed 2 – Iron Ore	Premises map: Shed 2
6.	Shed 3 – Iron Ore	Premises map: Shed 3
7.	Shed 4 – Iron Ore, spodumene	Premises map: Shed 4
8.	Shed 5 – Sulfur and spodumene	Premises map: Shed 5 (Sulfur)
9.	Shed 6 – Spodumene and fertiliser	Premises map: Shed 6
10.	Hybrid car dumper	Premises map: Car Dumper
11.	Grab bucket	N/A (removable equipment)
12.	Rotating tipping frame	N/A (mobile equipment)
13.	Conveyor system (Iron Ore Circuit)	Premises map: Depicted by red line
14.	Conveyor system (Sulfur Circuit)	Premises map: Depicted by yellow line
15.	Iron Ore Foaming System	Premises map: Foaming System
<b>Related to Primary Activities (Category 58/58A)</b>		
16.	Vacuum truck	N/A – mobile
17.	Water truck	N/A – mobile
18.	Metals Water Treatment Plant (MWTP)	Figure 3: Wastewater treatment - Sulphur and MWTP plants
19.	Sulfur Water Treatment Plant	Figure 3: Wastewater treatment - Sulphur and MWTP plants



	Infrastructure and equipment	Plan reference
20.	Hume interceptors	Figure 3: Sump 1, Sump 3 and Sump 4.
21.	Storm DMT Filter System	Figure 3: StormDMT
22.	Drains	Figure 3: Drain 1 to Drain 3
23.	Roads (including the truck turnaround point at Berth 3)	Premises map: Truck turnaround (hairpin bend)
24.	Spill containment unit	Premises map: Mobile Spill Containment Unit storage area
<b>Category 82: Boat building and maintenance</b>		
25.	Boat maintenance area, no current permanent infrastructure or equipment	Premises map: Boat Maintenance Area

## Site layout

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

## Bulk materials loaded and unloaded

The types of bulk material commodities and amounts that have been assessed are specified in Column 2 of Table 10. The bulk materials are transported to and from the Premises as specified in Column 2 of Table 10 and stored in accordance with Column 3. The method used to load and unload the bulk materials is specified in Column 4 of Table 10.

**Table 10: Bulk granular material handling processes and amounts assessed**

Row	Column 1	Column 2	Column 3	Column 4
	Commodity and annual amounts assessed	Mode of transport	Storage	Loading/unloading method
1.	Type: Formed sulfur Amount: Up to 650,000 tonnes (imported)	Transported by ship and then transported within the Premises via partially enclosed conveyors and transfer points.	Unloaded and stored in bulk within Shed 5.	Bulka bags or grab bucket loaded into a hopper or from Berth 2.
2.	Type: Fertiliser (including Urea, DAP, MAP, MAPZSC, DAPZSC, Allrich, Gusto, Phosphate) Amount: Up to 500,000 tonnes (imported)	Transported by ship and then transported within the Premises directly offsite by truck or loaded into Shed 6  via trucks and front end loaders	Unloading, storage and outloading of fertiliser from Shed 6	Grab bucket loaded into trucks using a mobile hopper from Berth 2.
3.	Type: Spodumene Amount: Up to 2,000,000 tonnes (exported)	Transported to the Premises by truck.	Unloaded and stored in bulk within Shed 4, Shed 5 or	Loaded onto the ship using a rotating tipping frame from Berth 2.

			Shed 6.	Loaded onto the ship using ship loading equipment with chute from Berth 3.
4.	Type: Metal concentrates (nickel and copper) Amount: Up to 1,100,000 tonnes (exported)	Transported to the Premises within enclosed containers.	Stored in enclosed containers.	Loaded onto the ship using a rotating tipping frame.
5.	Type: Iron Ore Amount: N/A	Transported to Premises by train.	Unloaded and stored within Sheds 1 to 4 inclusive.	Loaded onto ship using ship loading equipment with chute.
6.	Type: Total bulk granular material handled Amount: Up to 14,500,000 tonnes per year, and Up to 100,000 tonnes per day	As above for each individual commodity.		

## Schedule 3: Infrastructure and equipment

**Table 11: Infrastructure and equipment operational requirements**

Row	Column 1	Column 2	Column 3
	Site infrastructure and equipment	Description	Operational requirements
1.	MWTP	MWTP receives stormwater and road sweep water for treatment from stormwater tanks located on Berth 2 and Hume Interceptors.	Must be operated and maintained for the treatment of collected stormwater and washwater prior to discharge to the Reclaim Area.
2.	SWTP	Stormwater and washwater collected from the Sulfur Circuit (depicted in the Site Plan) is directed to the SWTP for treatment of metals and balance pH.	Must be operated and maintained for the treatment of collected stormwater and washwater prior to discharge to the Reclaim Area.
3.	Storm DMT Filter System and sludge storage tank	<p>A stormwater capture and treatment system capable of containing a first flush volume of 195 m<sup>3</sup> from the StormDMT capture area on Berth 2, as depicted in Schedule 1.</p> <p>Captured stormwater within the first flush chamber is then either manually treated with hydrated lime/acid, removed for offsite disposal or passed through a filtration media prior to disposal to the Esperance Harbour.</p>	<p>Replace filtration media as often as required to ensure the manufacturer's stated level of performance is maintained for the Storm DMT Filter System.</p> <p>Sludges from the first flush sump must be automatically removed via a sludge pump to the sludge tank to maintain first flush tank storage capacity.</p> <p>Sludge removed from the sludge tank must be dewatered to the MWTP.</p> <p>During a copper concentrate spill event the Storm DMT Filter System must be operated in accordance with condition 31 of this Licence.</p>
4.	Washwater and stormwater infrastructure for berths including vacuum trucks and road sweepers	<p>Stormwater and washwater captured on Berth 2 is directed to Hume Interceptors H1, H2 and H4 or the two stormwater tanks located on the eastern side of Berth 2.</p> <p>Vacuum trucks and road sweepers are used to remove material from sealed surfaces on the berths.</p>	<p>Stormwater and washwater at Berths 1 and 2 must either:</p> <ul style="list-style-type: none"> <li>be collected for reuse or disposal; or</li> <li>pass through a Hume interceptor H1, H2 and H4 prior to discharge to the marine environment.</li> </ul> <p>Storm DMT Filter System must direct all stormwater to H4.</p> <p>The Hume Interceptors must be cleaned (sediments and solids removed) at least monthly and in accordance with conditions 29 and 30.</p> <p>Collected wastewater from Hume interceptors must be treated at the</p>

Row	Column 1	Column 2	Column 3
	Site infrastructure and equipment	Description	Operational requirements
			<p>MWTP prior to reuse, disposal or discharge.</p> <p>Berths 2 to 3 inclusive must be vacuumed or swept to recover any spill during loading/unloading. All spilt material must be recovered within 72 hours.</p>
5.	Stormwater drains	Stormwater drains are located to the west of Berth 1 to capture areas where bulk granular material is not transported across.	Stormwater collected from areas where bulk granular material is not transported or handled may be discharged to the Esperance Harbour via stormwater drains SW1 to SW3 inclusive.
6.	Spill plates	Spill plates are installed when loading and unloading to prevent discharge and spills of material to the Esperance Harbour.	Spill plates must be placed between the ship and Berth at all times during ship loading/unloading when grab buckets are used, to prevent entry of material to the Esperance Harbour.
7.	Conveyor system (Sulfur Circuit)	Conveyors used to transport sulfur from the grab hopper to Shed 5.	All conveyors used for sulfur must be covered (top, sides and bottom) for the purpose of reducing the product's exposure to wind.
8.	Car Dumper and conveyor system (Iron Ore Circuit)	Conveyors used to transport iron ore from the Car Dumper to any of Sheds 1 to 4 or directly to the ship.	<p>All conveyors remain enclosed and equipped with dust extraction units.</p> <p>The Iron Ore Circuit must include water sprays and a foaming spay unit.</p> <p>Noise cladding with a noise rating coefficient of 0.9 must be maintained on the inside of shed walls and ceilings.</p>
9.	Sulfur hopper	The sulfur hopper receives material from a grab bucket to deliver material to the Sulfur Circuit.	Hopper sprays must be operated whenever visible dust is being generated while tipping or unloading material.
10.	Storage Sheds 1 to 4	Sheds are equipped with negative pressure exhaust systems designed to prevent air (and dust) escaping through doors by reducing the shed pressure to below the outside atmospheric pressure.	During handling and movement of iron ore with front end loaders and stockpiling of material, exhaust systems must be operational.
11.	Storage Sheds 4 to 6	<p>Material storage Shed 5 receives sulfur via conveyor systems that deposit material from the shed ceiling.</p> <p>Material storage Sheds 4, 5 and 6 receive</p>	Spodumene stored at the premises must only be unloaded, stockpiled and re-loaded (into containers) with storage Sheds 4 to 6.



Row	Column 1	Column 2	Column 3
	Site infrastructure and equipment	Description	Operational requirements
		<p>spodumene from containers transported via truck. Fertiliser is also stored in Shed 6, via trucks inloading and outloading.</p> <p>Material storage Sheds 5 and 6 must be enclosed (excluding doors) fit for purpose structures.</p> <p>Material storage Shed 5 must be equipped with a sprinkler system for the purpose of suppressing stockpile dust.</p>	<p>Sulfur stored at the premises must only be unloaded, stockpiled and re-loaded (into containers) within storage Sheds 5 and 6.</p> <p>Fertiliser stored at the premises must only be unloaded, stockpiled and re-loaded within storage Shed 6.</p> <p>Shed 5 sprinkler system must remain operational for the purpose of achieving compliance with Condition 19.</p> <p>Surfactant solution must be applied to sulfur product during stockpiling activities in Shed 5.</p>
12.	Berth 3 ship loader	Telescopic chute equipped with a ring spray (fogger) used for dust suppression.	Operate the ring spray fogger at all times when visible dust is being generated from the loading iron ore material.
13.	Spodumene containers	Containers used for the transport and loading of spodumene onto ships.	The integrity of the loading containers must be maintained so that they are fit for the purpose of transmitting spodumene from Shed 4, Shed 5 or Shed 6 into a vessel's hold without emissions, spillage or loss of spodumene whilst in transit or storage.
14.	Nickel concentrate and copper concentrate	Containers used for the transport and loading of nickel and copper concentrates onto ships.	<p>The Licence Holder must ensure that all containers used for the transport of nickel or copper concentrate remain closed at all times when outside of the vessel's hold, with the exception of containers opened for the purposes of sampling product.</p> <p>The integrity of the loading containers must be maintained so that they are fit for the purpose of transporting nickel or copper concentrates into a vessel's hold without emissions, spillage or loss of nickel concentrate or copper concentrate whilst in transit or storage.</p> <p>The Licence Holder must operate misting /fogging sprays at the top of the vessel's hold at all times during the loading of nickel and copper</p>

Row	Column 1	Column 2	Column 3
	Site infrastructure and equipment	Description	Operational requirements
			concentrates.
15.	Sweeper truck	A sweeper truck used to remove material from sealed surfaces at Berths.	Wet sweeping must be conducted at the end of each ship unloading/loading event.
16.	Boat maintenance infrastructure and equipment	Boat maintenance activities occur to the east of Berth 2 adjacent to the tug boat storage pens. Boat maintenance activities may include painting, descaling or repairs.	<p>All wash-water must be captured and directed to a tank for incorporation into the MWTP.</p> <p>The boat maintenance area must be swept and vacuumed on completion of any boat maintenance activities.</p> <p>All solid waste must be disposed of at an appropriately licensed landfill.</p> <p>Tarpaulins must be used to line the berth underneath the vessel area extending to a three metre perimeter around the vessel during any vessel painting or mechanical servicing activities.</p> <p>No more than 10 litres of anti-fouling paint is to be kept on the berth at any one time.</p>

## Schedule 4: Monitoring

### Reportable Event and Limit exceedance reports

In relation to a Limit exceedance as identified in Column 4 of Table 6, a notification to the CEO (as per condition 27) must contain:

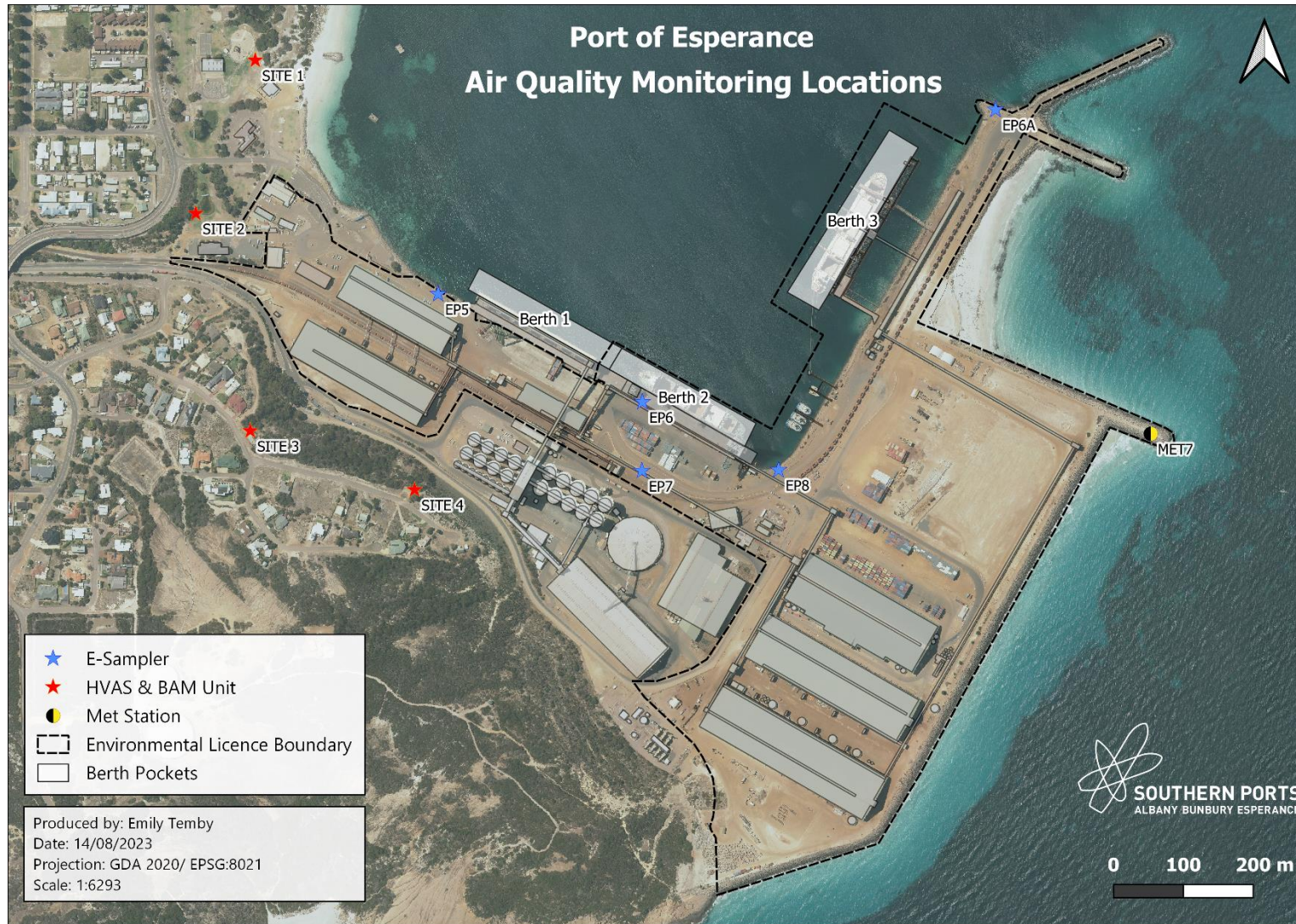
- the date that the Limit exceedance was identified and the date on which the Limit exceedance was likely to have occurred.
- a copy of the laboratory results confirming the Limit exceedance.
- a description of activities occurring at the Premises on the date of the Limit exceedance.

In relation to a Reportable Event (see condition 28) and/or for a 7-day follow-up report of a Limit exceedance (see condition 27), a report must contain:

- the Reportable Event and/or Limit exceedance date(s).
- the raw monitoring data for the Reportable Event/Limit exceedance in tabulated form.
- time series graphical plots for the day on which the Reportable Event/Limit exceedance occurred.
- details of investigation and mitigation measures that have been undertaken including the following:
  - Confirmation that the data received is correct (no instrument fault).
  - Determination of the source of the exceedance to establish whether the exceedance can be attributed to the Licence Holder's activities through:
    - the dust level recorded at the exceedance site;
    - review of meteorological data at Meteorological Station EP7 (including wind speed and direction).
  - In the event that the Reportable Event or Limit exceedance may be attributed to Licence Holder's activities:
    - where spodumene, copper concentrate and/or nickel concentrate is being loaded, a review of the Moisture Content of materials received at the time of the exceedance against DEM; and
    - comparison of dust levels from all dust monitoring sites (Sites 1 to 4);
  - In the event that the Reportable Event of Limit exceedance can be attributed to Licence Holder's activities the corrective and mitigation measures undertaken including but not limited to:
    - actions taken by site personnel as a response to any high level alarms;
    - maintenance of onsite dust management infrastructure and equipment, if identified as a causal factor by site personnel;
    - reporting of dust events to all stakeholders, including analysis of probable causes; and
    - audit of process controls (e.g. dust alarm procedures).



## Air quality monitoring locations

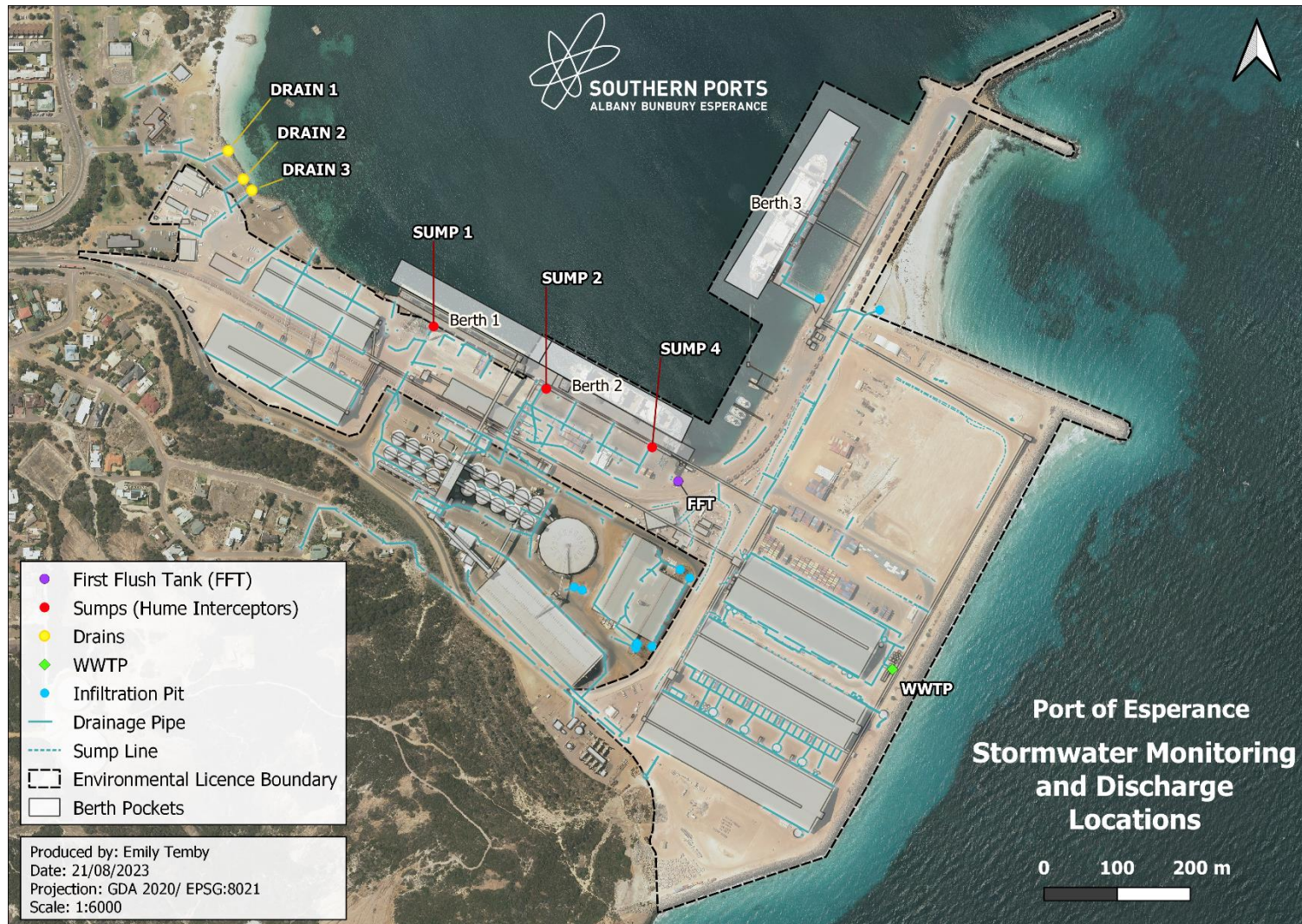


**Figure 2: Ambient air quality monitoring sites**

L5099/1974/14 (Date of amendment: 24 January 2024)



## Stormwater monitoring locations and stormwater discharge map



**Figure 3: Stormwater monitoring and stormwater discharge location**