

**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

**Amendment:** 06/08/2019

Prescribed Premises: Category 58: Bulk material loading or unloading

Category 58A: Bulk material loading or unloading (salt)

Category 82: Boat building and maintenance

**Premises:** Port of Esperance

The Esplanade and Bower Avenue

**ESPERANCE WA 6450** 

Part of Crown Reserve 28207

Certificate of Title Volume 3127 Folio 354

This Licence is granted to the Licence Holder, subject to the following conditions, on 22/10/2018, by:

Digitally signed by Danielle Eyre on 22/10/2019

#### **Danielle Eyre**

Senior Manager, Industry Regulation (Resource Industries)

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

This Licence Amendment is granted to the Licence Holder, subject to the following conditions, on 06/08/2019, by

Tim Gentle

Manager – Resource Industries

REGULATORY SERVICES

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

### **Explanatory notes**

These explanatory notes do not form part of this Licence.

#### **Defined terms**

Definition of terms used in this Licence can be found at the end of this Licence. Terms which are defined have the first letter of each word capitalised throughout this Licence.

#### Department of Water and Environmental Regulation

The Department of Water and Environmental Regulation (DWER) is established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the *Environmental Protection Act 1986* (WA) (EP Act). The Department also monitors and audits compliance with licences, takes enforcement action and develops and implements licensing and industry regulation policy.

#### Licence

Section 56 of the EP Act provides that an occupier of Prescribed Premises commits an offence if Emissions are caused or increased, or permitted to be caused or increased, or Waste, noise, odour or electromagnetic radiation is altered, or permitted to be altered, from Prescribed Premises, except in accordance with a works approval or licence.

Categories of Prescribed Premises are defined in Schedule 1 of the *Environment Protection Regulations 1987* (WA) (EP Regulations).

This Licence does not authorise any activity which may be a breach of the requirements of another statutory authority including, but not limited to the following:

- conditions imposed by the Minister for Environment under Part IV of the EP Act;
- conditions imposed by DWER for the clearing of native vegetation under Part V, Division 2 of the EP Act;
- any requirements under the Waste Avoidance and Resource Recovery Act 2007;
- any requirements under the Environmental Protection (Controlled Waste) Regulations 2004; and
- any other requirements specified through State legislation.

It is the responsibility of the Licence Holder to ensure that any action or activity referred to in this Licence is permitted by, and is carried out in compliance with, other statutory requirements.

The Licence Holder must comply with the Licence. Contravening a Licence condition is an offence under s.58 of the EP Act.

#### Responsibilities of a Licence Holder

Separate to the requirements of this Licence, general obligations of Licence Holders are set out in the EP Act and the regulations made under the EP Act. For example, the Licence Holder must comply with the following provisions of the EP Act:

- the duties of an occupier under section 61; and
- 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 (s.53).

Strict penalties apply for offences under the EP Act.

#### Reporting of incidents

The Licence Holder has a duty to report to DWER all discharges of waste that have caused

or are likely to cause Pollution, Material Environmental Harm or Serious Environmental Harm, in accordance with s.72 of the EP Act.

#### Offences and defences

The EP Act and its regulations set out a number of offences, including:

- Offence of emitting an Unreasonable Emission from any Premises under s.49.
- Offence of causing Pollution under s.49.
- Offence of dumping Waste under s.49A.
- Offence of discharging Waste in circumstances likely to cause Pollution under s.50.
- Offence of causing Serious Environmental Harm (s.50A) or Material Environmental Harm (s.50B).
- Offence of causing Emissions which do not comply with prescribed standards (s.51).
- Offences relating to Emissions or Discharges under regulations prescribed under the EP Act, including materials discharged under the *Environmental Protection* (Unauthorised Discharges) Regulations 2004 (WA).
- Offences relating to noise under the *Environmental Protection (Noise) Regulations* 1997 (WA).

Section 53 of the EP Act provides that a Licence Holder commits an offence if Emissions are caused, or altered from a Prescribed Premises unless done in accordance with a Works Approval, Licence or the requirements of a Closure Notice or an Environmental Protection Notice.

Defences to certain offences may be available to a Licence Holder and these are set out in the EP Act. Section 74A(b)(iv) provides that it is a defence to an offence for causing Pollution, in respect of an Emission, or for causing Serious Environmental Harm or Material Environmental Harm, or for discharging or abandoning Waste in water to which the public has access, if the Licence Holder can prove that an Emission or Discharge occurred in accordance with a Licence.

This Licence specifies the Emissions and Discharges, and the limits and Conditions which must be satisfied in respect of Specified Emissions and Discharges, in order for the defence to offence provision to be available.

#### Authorised Emissions and Discharges

The Specified and General Emissions and Discharges from Primary Activities conducted on the Prescribed Premises are authorised to be conducted in accordance with the Conditions of this Licence.

Emissions and Discharges caused from other activities not related to the Primary Activities at the Premises have not been Conditioned in this Licence. Emissions and Discharges from other activities at the Premises are subject to the general provisions of the EP Act.

#### Amendment of licence

The Licence Holder can apply to amend the Conditions of this Licence under s.59 of the EP Act. An application form for this purpose is available from DWER.

The CEO may also amend the Conditions of this Licence at any time on the initiative of the CEO without an application being made.

Amendment Notices constitute written notice of the amendment in accordance with s.59B(9) of the EP Act.

#### **Duration of Licence**

The Licence will remain in force for the duration set out on the first page of this Licence or until it is surrendered, suspended or revoked in accordance with s.59A of the EP Act.

#### Suspension or revocation

The CEO may suspend or revoke this Licence in accordance with s.59A of the EP Act.

#### Fees

The Licence Holder must pay an annual licence fee. Late payment of annual licence fees may result in the licence ceasing to have effect. A licence that has ceased to have effect due to non-payment of annual licence fees continues to exist; however, it ceases to provide a defence to an offence under s.74A of the EP Act.

Late fees are a component of annual licence fees and should a Licence Holder fail to pay late fees within the time specified the licence will similarly cease to have effect.

## **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		
Specified Emissions			
Fugitive dust	Subject to compliance with conditions 8 to 11, 13, 14 and 15 to 28 inclusive.		
Discharge of stormwater and industrial wash water related to Primary Activities.	Subject to compliance with conditions 13, 14 and 29 to 33 inclusive.		
Noise	Subject to compliance with conditions 8 and 12 to 14.		
Minor Spillage of iron ore, spodumene, fertilisers and/or sulfur from the bulk material loading of vessels.	Subject to compliance with condition 13.		
General Emissions (excluding Specified Emission	ons)		
Emissions which arise from the Primary Activities set out in the General Description in Schedule 2.	<ul> <li>Emissions excluded from General Emissions are:</li> <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,</li> </ul>		

Column 1	Column 2		
Emission type	Exclusions/limitations/requirements		
	including materials discharged under the Environmental Protection (Unauthorised Discharges) Regulations 2004.		

### **Trial shipments**

#### **Notification of a Trial shipment**

- 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 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 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;
  - (e) include an analysis of risk to human health and the environment 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 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) (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)

- **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.

#### **Trial restrictions**

- **4.** The Trial must cease:
  - (a) 12 months from the date of the commencement of the first shipment; or
  - (b) immediately after the shipment where the cumulative throughput amounts 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).
- 5. The Licence Holder must not Trial the bulk handling of materials that:
  - (a) Contain asbestos in concentrations equal to or greater than 0.01% w/w for non-friable asbestos or 0.01% w/w for fibrous asbestos;
  - (b) Contain respirable silica equal to or greater than 1% w/w;
  - (c) Exceed the radiation transport limit of 10 Bq/g for Uranium-238 and Thorium-232 combined;
  - (d) Exceed Rubidium-87 concentrations of 30 Bq/g; or
  - (e) Are a waste or waste-derived byproduct (except Clean fill).

#### Reporting

- **6.** The Licence Holder must submit a report to the CEO which includes the results of monitoring required by condition 2(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**

7. 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 6, at least three months prior to the completion of the Trial period.

### **Infrastructure and Equipment**

#### **Further works**

- **8.** The Licence Holder must install and undertake the works for the infrastructure and equipment:
  - (a) specified in Column 1;
  - (b) to the requirements specified in Column 2;
  - (c) at the location specified in Column 3; and
  - (d) within the timeframes specified in Column 4,

in Table 2.

**Table 2: Works requirements for Premises** 

>	Column 1	Column 2	Column 3	Column 4
Row	Infrastructure and equipment	Requirements	Location	Timeframe
1.	Hybrid car dumper	Construction, modification, mobilisation and installation of equipment associated with the hybrid car dumper must be carried out between the hours of 0700 to 1900 Monday to Saturday, and between 0900 to 1900 Sundays and public holidays.  Noise cladding with a noise rating coefficient of 0.9 lines the Car Dumper shed walls and ceiling so that noise emissions meet assigned	Car Dumper shown in the Premises Map, Schedule 1.	N/A
		levels.		
2.	Gravel roadways	The truck turnaround point must be Sealed for the purpose of minimising dust emissions.	Truck turnaround (hairpin bend), shown in the Premises Map, Schedule 1.	Must be completed by 30 June 2019.
		The remainder of unsealed gravel roadways along Berth 3 must be Sealed for the purpose of minimising dust	Berth 3 road staged sealing shown in the Premises Map,	Must be completed by 30 June 2022

		emissions.	Schedule 1.	
3.	Construction of the StormDMT	Capable of storing 195,000 m³ of first flush stormwater.  Built with a discharge point capable of being closed off to prevent the discharge of stormwater when required by Conditions of this Licence.	Berth 2	Must be completed by 31 December 2019

- **9.** The Licence Holder must not depart from the requirements in Table 2 except:
  - (e) where such departure is minor in nature and does not materially change or affect the infrastructure or equipment; or
  - (f) where such departure improves the functionality of the infrastructure or equipment and reduces the risk to public health and the environment; and all other conditions in this Licence are still satisfied.
- **10.** The Licence Holder must notify the CEO in writing of the date the monitor specified in Row 1 in Table 2 are installed and operational.
- **11.** The Licence Holder must provide a report to the CEO within one month of the works specified in Rows 1 and 3 in Table 2 are completed which includes:
  - (g) certification by a suitably qualified professional engineer or builder that the works have been completed and that there are no material defects; and
  - (h) signed by a person authorised to represent the Licence Holder and contains the printed name and position of that person within the Licence Holder's organisation.
- The Licence Holder must provide to the CEO certification from a person qualified and experienced in the area of environmental noise assessment and who by their qualifications and experience is eligible to hold membership of the Australian Acoustical Society or the Australian Association of Acoustical Consultants, confirming that noise cladding satisfies the requirements specified in Row 1, Column 2 of Table 2 has been constructed with no material defects.

#### **Maintenance and operation requirements**

13. 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**

14. 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 7.

#### Nickel and copper concentrate acceptance and monitoring

- 15. 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.
- **16.** The Licence Holder must not handle in bulk any nickel concentrate containing nickel subsulfide (Ni<sub>3</sub>S<sub>2</sub>) as determined from a representative sample.

**17.** For the purposes of Conditions 15 and 16, a representative sample is to be determined in accordance with Table 3.

Table 3: 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> )	A representative blended sample of the nickel concentrate.	Annually	Onsite laboratory using clearly documented methodology.
		Nickel disulfide (NiS <sub>2</sub> )	A representative sample is a blended composite sample (of at least two subsamples) from one week's production		Reputable Laboratory validating methodology and technical results provided on an annual
		Respirable Silica	of nickel.		basis in a written report.

- **18.** 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.
- 19. 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 18.
- **20.** The Licence Holder must ensure that no xanthate odours cross the Premises boundary.

#### Spodumene acceptance and monitoring

- **21.** The Licence Holder must only accept spodumene at the Premises which meets the following specifications:
  - (i) contains a Moisture Content at or above the DEM level derived from application of AS4156.6-2000;
  - (j) the proportion of muscovite contained within a representative sample of the spodumene is at or below 5% by weight; and
  - (k) the proportion of respirable silica quartz contained within a representative sample of the spodumene is at or below 1% by weight.

For the purposes of this condition, a representative sample for Moisture Content, muscovite and respirable silica quartz, is determined in accordance with Table 4 below.

Table 4: 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.

- **22.** 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.
- 23. 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 22.

#### Iron ore acceptance and monitoring

- 24. 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.
- 25. The Licence Holder must undertake Moisture Content monitoring of iron ore received at the Premises for the purpose of comparison against the DEM level of each iron ore product derived from the application of AS4156.6-2000.

For the purposes of this condition, Moisture Content is to be determined in accordance with Table 5 below.

Table 5: Iron ore moisture content analysis

Column 1	Column 2	Column 3	Column 4
Location	Parameter	Averaging Period	Method
CV09 Moisture Analyser depicted in	Moisture Content	Continuous during receipt of iron ore at the Car Dumper.	The CV09 Moisture Analyser must be calibrated against samples analysed using ISO3087-2011.
Schedule 1			Calibration must be conducted on an annual basis, when loading iron ore in that Annual Period.

### **Ambient air quality monitoring**

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

- (I) at the locations specified in Column 1;
- (m) for the parameters specified in Column 2;
- (n) at the averaging periods specified in Column 3;
- (o) at the frequencies specified in Column 6;
- (p) in accordance with the methods specified in Column 7; and
- (q) for the period specified in Column 8,

in Table 6.

Table 6: 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 – 5, depicted in Figure 1 in Schedule 4	Particles as PM <sub>10</sub> (µg/m³)	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 – 5, depicted in Figure 1 in Schedule 4	Iron (μg/m³) as PM₁₀ 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/m³) as PM₁₀ 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 loading periods.	AS3580.9.6; and USEPA IO- 3.4	
	Copper (μg/m³) as PM₁₀ using HVAS	24 hour average (midday to midday)	1.0 μg/m <sup>3</sup>	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 (µg/m³) as PM₁₀ 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 6 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 6 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, following construction of the Storm DMT Filter System in accordance with Table 2 and 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;
  - (b) remove sediment and water trapped in the Black Swan Shed Pad sump and Hume Interceptors 2 to 4 inclusive, 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:
  - (a) Hume Interceptors 2 to 4 inclusive are emptied of washdown water and sediment; and
  - (b) 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 7.

Table 7: Stormwater and wash water discharge monitoring table

Column 1	Column 2	Column 3	Column 4	Column 5
Locations	Parameters	Averaging Period	Frequency	Method
Hume Interceptor: H1 and H2 depicted in Figure 2 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: H3 and H4 depicted in Figure 2 in Schedule 4. Storm DMT Filter System depicted in Figure 2 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 Interceptors: Monthly, or until the installation and operation of the Storm DMT Filter System. Storm DMT Filter System: Monthly once operational	AS 5667.1-1998 and AS 5667.10-1998
Stormwater outlets: SW1, SW2 and SW3 depicted in Figure 2 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 8.

**Table 8: Meteorological monitoring table** 

Column 1	Column 2	Column 3	Column 4
Location	Parameter	Height (m)	Method
EP7 depicted in Figure 1 in	Wind speed (m/s)	10	AS 3580.14-2014
Schedule 4.	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 17, 19, 23, 24, 25, 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 for the Annual Period required by conditions 16, 17, 20, 24, 25, 31 and 32 in graphical or tabulated format;
  - (c) copies of the reports for representative samples specified in Tables 3 and 4;
  - (d) a summary of Reportable Events and Limit exceedances;
  - (e) a summary of complaints received under Condition 34;

- (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 and Interpretation**

#### **Definitions**

In this Licence, the following terms have the following meanings:

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 *Methods of testing soils for engineering purposes – Soil moisture content tests – Determination of the moisture content of a soil – Oven drying method (standard method).* 

**AS 3580.1.1-2016** means the Australian Standard AS 3580.1.1 *Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment.* 

**AS3580.9.6** means the Australian Standard AS3580.9.6 *Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM10 high volume sampler with size selective inlet - Gravimetric method.* 

**AS3580.9.11-2016** means the Australian Standard AS 3580.9.11 Methods for sampling and analysis of ambient air – Method 9.11: Determination of suspended particulate matter—PM<sub>10</sub> beta attenuation monitors.

**AS 3580.14-2014** means the Australian Standard AS 3580.14 *Methods for sampling and analysis of ambient air – Meteorological monitoring for ambient air quality monitoring applications.* 

**AS 4156.6-2000** means the Australian Standard AS 4156.6 Coal preparation, Part 6: Determination of Dust/moisture Relationship for Coal.

**AS 5667.1-1998** means the Australian Standard AS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples.

**AS 5667.10-1998** means the Australian Standard AS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters.

**Assigned levels** means the noise level that applies to the premises according to the *Environmental Protection (Noise) Regulations 1987* 

**BAM** means Beta Attenuation Monitor

**CEO** for the purposes of notification means:

Chief Executive Officer
Department Administering the Environmental Protection Act 1986
Locked Bag 33 Cloisters Square
Perth WA 6850
info@dwer.wa.gov.au

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

**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.

**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.

**Continuous** means a data recovery rate of at least 90%, excluding times where equipment is removed from site for the purposes of calibration.

**Discharge** has the same meaning given to that term under the EP Act.

**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.

**Emission** has the same meaning given to that term under the EP Act.

**Environmental Harm** has the same meaning given to that term under the EP Act.

**EP Act** means the *Environmental Protection Act 1986* (WA).

**EP Regulations** means the *Environmental Protection Regulations* 1987 (WA).

**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.

HVAS 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 *Iron ores – Determination of the moisture content of a lot.* 

**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 Environmental Harm** has the same meaning given to that term under the EP Act. **Specified Emission** has the meaning set out in Condition 1 of this Licence.

**SWTP** means the Sulfur Water Treatment Pond depicted in Figure 2 of Schedule 4.

TDS means Total Dissolved Solids.

**TEOM** means Tapered Element Oscillating Microbalances Monitors

**Trial** means a test period during which the Licence Holder loads or unloads a new bulk granular material, not specified in Table 10 Schedule 2 of this Licence, at the Premises, in accordance with Conditions 2 to 7 inclusive.

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.

### Interpretation

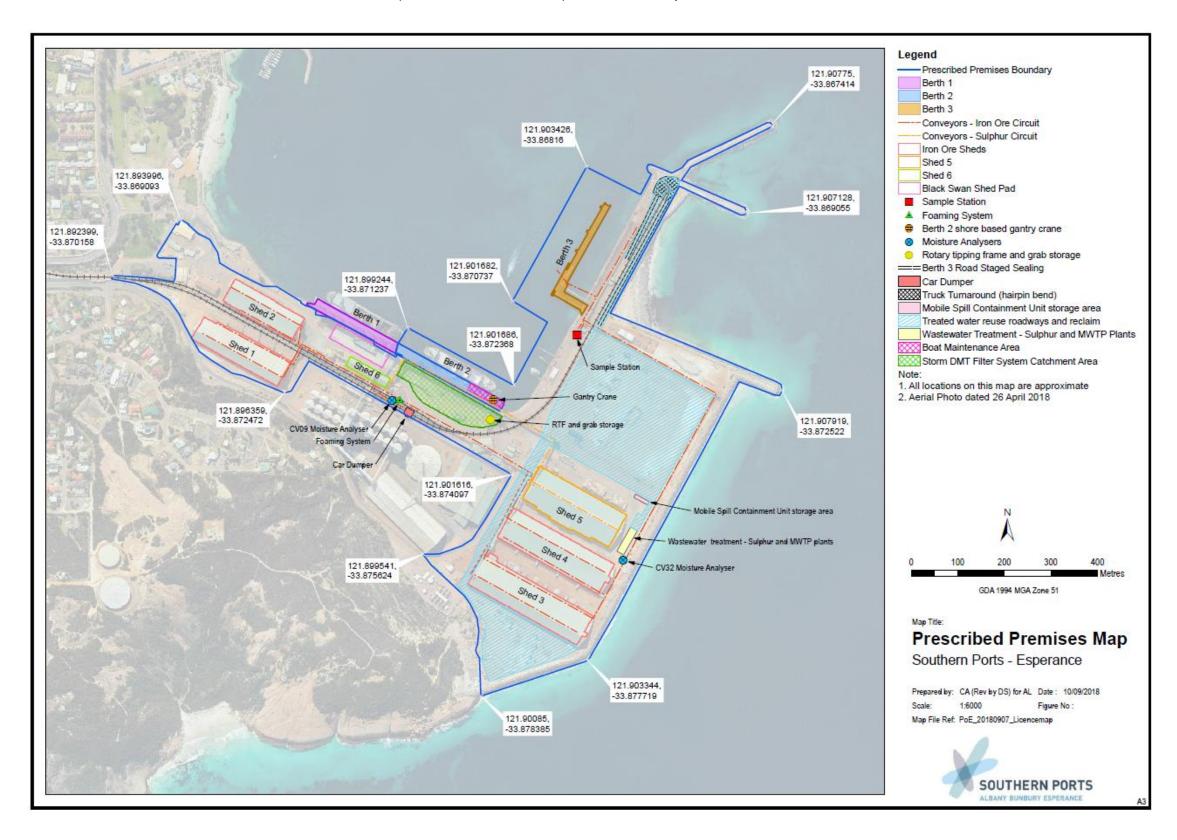
In this Licence:

- (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 means the version of the standard, guideline or code of practice in force at the time of granting of this Licence and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the Licence; and
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act.

# Schedule 1: Maps

# **Premises map**

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



# **Schedule 2: General description**

At the time of assessment, the following Emissions and Discharges from Primary Activities were considered in the determination of the risk and related Conditions for the Premises.

The Primary Activities constitute the following:

Primary Activity	Premises 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 materials 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

# 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			
Cate	Category 58/58A: Bulk material loading or unloading				
1.	Berth 2 – Nickel concentrate, copper concentrate, fertiliser, sulfur, spodumene	Premises map: Berth 2			
2.	Berth 3 – Iron Ore	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	Premises map: Shed 6			
10.	Hybrid car dumper	Premises map: Car Dumper			

	Infrastructure and equipment	Plan reference		
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		
16.	Moisture content analysers and sample stations	Premises map: CV09 Moisture Analyser; CV32 Moisture Analyser; Sample Station		
Rela	Related to Primary Activities (Category 58/58A)			
17.	Vacuum truck	N/A – mobile		
18.	Water truck	N/A – mobile		
19.	Metals Water Treatment Plant (MWTP)	Figure 2: Wastewater treatment - Sulphur and MWTP plants		
20.	Sulfur Water Treatment Plant	Figure 2: Wastewater treatment - Sulphur and MWTP plants		
21.	Hume interceptors	Figure 2: H1 to H4		
22.	Storm DMT Filter System	Figure 2: StormDMT		
23.	Drains	Figure 2: SW1 to SW3		
24.	Roads (including the truck turnaround point at Berth 3)	Premises map: Berth 3 road staged sealing; and Truck turnaround (hairpin bend)		
25.	Spill containment unit	Premises map: Mobile Spill Containment Unit storage area		
Cate	Category 82: Boat building and maintenance			
26.	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

	Column 1	Column 2	Column 3	Column 4
Row	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 200,000 tonnes (imported)	Transported by ship and then transported within the Premises directly offsite by truck.	No fertiliser storage onsite.	Bulka bags or grab bucket loaded into trucks using a mobile hopper from Berth 2.
3.	Type: Spodumene Amount: Up to 1,000,000 tonnes (exported)	Transported to the Premises by truck.	Unloaded and stored in bulk within Shed 4, Shed 5 or Shed 6.	Loaded onto the ship using a rotating tipping frame.
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.		

# **Boat building and maintenance**

The activity associated with boat building and maintenance that has been assessed is limited to the maintenance of three tug boats used at the Port. The location of the activity is limited to the Boat Maintenance Area at the eastern end of Berth 2 as depicted in Schedule 1. Boat maintenance activities assessed include any abrasive blasting, painting, servicing or repairs required for maintenance of the three tug boats operated by the Licence Holder.

# **Schedule 3: Infrastructure and equipment**

Table 11: Infrastructure and equipment operational requirements

Column 1 Column 2 Column 3			Column 3
Row	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 (proposed)	A stormwater capture and treatment system capable of containing a first flush volume of 195 m³ from the StormDMT capture area on Berth 2, as depicted in Schedule 1.  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.	Replace filtration media as often as required to ensure the manufacturer's stated level of performance is maintained for the Storm DMT Filter System.  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.  Sludge removed from the sludge tank must be dewatered to the MWTP.  During a copper concentrate spill event the Storm DMT Filter System must be operated in accordance with condition 32 of this Licence.
4.	Washwater and stormwater infrastructure for berths including vacuum trucks and road sweepers	Stormwater and washwater captured on Berth 2 is directed to Hume Interceptors H1 to H4 or the two stormwater tanks located on the eastern side of Berth 2.  Vacuum trucks and road sweepers are used to remove material from sealed surfaces on the berths.	Stormwater and washwater at Berths 1 and 2 must either:  • be collected for reuse or disposal; or  • pass through a Hume interceptor H1 to H4 prior to discharge to the marine environment.  Hume interceptors H3 and H4 must direct all stormwater to the Storm DMT Filter System once operational.  The Hume Interceptors must be cleaned (sediments and solids removed) at least monthly and in accordance with conditions 30 and 31.  Collected wastewater from Hume interceptors must be treated at the MWTP prior to reuse, disposal or discharge.  Berths 2 to 3 inclusive must be vacuumed or swept to recover any spill during

>	Column 1	Column 2	Column 3	
Row	Site infrastructure and equipment	Description	Operational requirements	
			loading/unloading. All spilt material must be recovered within 72 hours.	
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.	All conveyors remain enclosed and equipped with dust extraction units.	
			The Iron Ore Circuit must include water sprays and a foaming spay unit.	
			Noise cladding with a noise rating coefficient of 0.9 must be maintained on the inside of shed walls and ceilings.	
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 5 and 6	Material storage Shed 5 receives sulfur via conveyor systems that deposit material from the shed	Spodumene and sulfur stored at the premises must only be unloaded, stockpiled and re-loaded (into containers) within storage Sheds 5 and 6.	
		ceiling.  Material storage Sheds 4, 5 and 6 receive spodumene from	Shed 5 sprinkler system must remain operational for the purpose of achieving compliance with Condition 23.	
Material storage Sh must be enclosed (		containers transported via truck.  Material storage Sheds 5 and 6 must be enclosed (excluding doors) fit for purpose structures.	Surfactant solution must be applied to sulfur product during stockpiling activities in Shed 5.	
		Material storage Shed 5 must be		

>	Column 1	Column 2	Column 3	
Row	Site infrastructure and equipment	Description	Operational requirements	
		equipped with a sprinkler system for the purpose of suppressing stockpile dust.		
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.	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.	
			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.	
			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 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.	Water truck	Water truck used to spray water on unsealed roads for the purposes of dust suppression only	Until the unsealed roads are bituminised in accordance with condition 8, unsealed roads must remain damp at all times during use.	
17.	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.	All wash-water must be captured and directed to a tank for incorporation into the MWTP.  The boat maintenance area must be swept and	
			vacuumed on completion of any boat maintenance activities.	
			All solid waste must be disposed of at an appropriately licensed landfill.	
			Tarpaulins must be used to line the berth underneath the vessel area extending to a three	

Row	Column 1	Column 2	Column 3
	Site infrastructure and equipment	Description	Operational requirements
			metre perimeter around the vessel during any vessel painting or mechanical servicing activities.
			No more than 10 litres of anti-fouling paint is to be kept on the berth at any one time.

# **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;
    - if the exceedance was recorded at Sites 1 to 4, a comparison of dust levels recorded at Site 5; and
    - 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;
    - where iron ore is being handled, the Moisture Content of iron ore handled as recorded from the CV09 Moisture Analyser when received at the Premises; and
    - comparison of dust levels from all dust monitoring sites (Sites 1 to 5);
  - o 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:

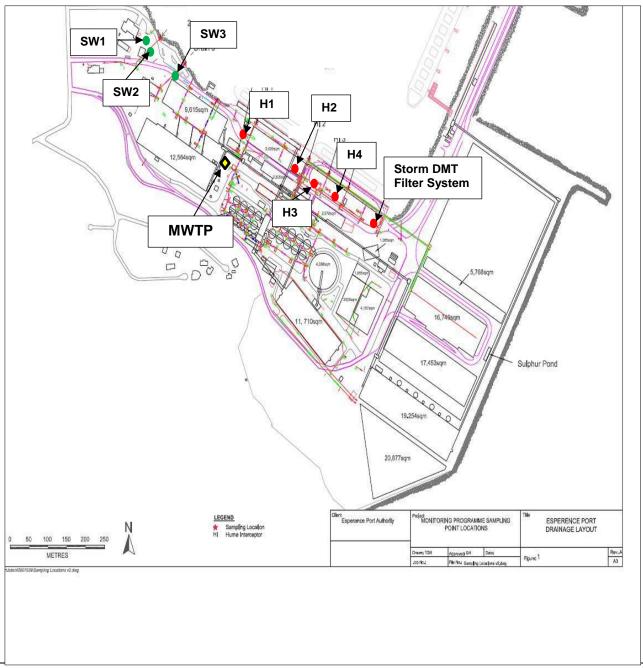
- actions taken by site personnel as a response to any high level alarms;
- maintenance of onsite dust management infrastructure and equipment, if identified as a causal factor by site personnel;
- reporting of dust events to all stakeholders, including analysis of probable causes; and
- audit of process controls (e.g. dust alarm procedures).

# Air quality monitoring locations



Figure 1: Ambient air quality monitoring sites

# Stormwater monitoring locations and stormwater discharge map



H = Hume interceptor.

SW = stormwater drain

MWTP = Metals Water Treatment Plant

Figure 2: Stormwater monitoring and stormwater discharge locations