



## Application for Licence Amendment

### Part V Division 3 of the *Environmental Protection Act 1986*

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<b>Licence Number</b>	L4275/1972/15
<b>Licence Holder</b>	Mid West Ports Authority
<b>File Number</b>	2011/000451-3
<b>Premises</b>	Geraldton Port Marine Terrace, West End, WA 6530 Part of Lot 503 on Deposited Plan 57801
<b>Date of Report</b>	22 March 2021
<b>Proposed Decision</b>	Revised licence granted

**Terrel MacGregor**

**A/MANAGER, RESOURCE INDUSTRIES**

**REGULATORY SERVICES**

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

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## 1. Decision summary

Licence L4275/1972/15 is held by Mid West Ports Authority (licence holder) for the Geraldton Port (premises), located at Lot 503 Marine Terrace, West End, WA 6530.

This amendment report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the premises. As a result of this assessment, Revised Licence L4275/1972/15 has been granted.

## 2. Scope of assessment

### 2.1 Regulatory framework

In completing the assessment documented in this amendment report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

### 2.2 Amendment summary

On 6 November 2020 the licence holder submitted an application to the department to amend licence L4275/1972/15 under sections 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Increase of the daily throughput on the licence to reflect the actual current throughput; no increase of the annual tonnage is proposed
- Addition of the following products for bulk handling:
  - mineral sands concentrate
  - clean fill
  - fertiliser

**Table 1: Proposed throughput capacity changes**

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
58, 58A	44 000 tonnes per day 16 000 000 tonnes per annual period (cumulative)	160 000 tonnes per day	Daily input to be updated to reflect actual current throughput. No changes proposed for the maximum annual throughput.

#### 2.2.1 Mineral sands concentrate

Works approval W6329/2019/1 to authorise the export of up to 50 000 tonnes of mineral sands concentrate (MSC) per year was issued 31 January 2020. The works approval authorised time limited operations and a maximum of two shipments of not more than 10 500 tonnes of MSC each initially and was amended 25 September 2020, to allow three additional shipments (five in total). As per condition 3 and 4 of W6329/2019/1, the licence holder notified the department prior and post each shipment.

Below a summary of the time limited operation requirements for the export of MSC as per condition 2 in W6329/2019/1:

- MSC loaded from Berth 6 and in sealed containers that are emptied into the hold of the

vessel via rotating tipping frame

- Product moisture content between 4 and 8.5 % w/w (averaged over each shipment)
- Loaded from vertical drop height of < 2 m within the hold of the vessel
- Areas where MSC was loaded and transported to be swept following each shipment
- MSC waste material recovered from Berth clean-up activities is to returned to Eneabba mine site

### 2.2.2 Clean fill

On 20 May 2020, the licence holder submitted a trial notification for the export shipment of construction silica sands ('clean fill') to the department.

For the trial of construction silica sands, the Minimum Handling Method 3 (MHM3), as set out in the *Guideline: Port Authority bulk handling trials*, was determined suitable. The MHM3 requires product to be stored within a shed and, loaded by transporting to vessel via covered conveyors, delivered into the vessel using a chute lowered as far as possible below into the ship's hold. Dust monitoring via Tapered Element Oscillating Microbalance (TEOM) was undertaken as per licence condition 3.2.1.

A report of the first shipment which occurred between 18 and 20 July 2020 as required by L4275/1972/15 conditions was received by the department. One minor exceedance of PM<sub>10</sub> (50.4 µg/m<sup>3</sup>) was reported during shipment, however this incidence appeared to be caused by concrete cutting and jackhammering from a nearby industrial premises and not related to port activities. Table 2 lists the proposed clean fill products and details on handling. Construction silica sand handled as part of the trial had a particle size of 0.63 - 2 mm.

**Table 2 Clean fill products**

Product	Particle size distribution (PSD)	Transport	Storage	Handling
Non-silica sands (construction or fill sands)	0.075-2.36 mm	Via truck through shed and/or truck unloader	Enclosed shed	Via Berth 5 or Berth 4 ship loader
Gravel (fine, medium, coarse)	2.36 mm- 45 mm		Enclosed shed; Open stockpiles (depending on PSD/ low fines content)	
Clay (fine)	0.002- 0.075 mm	Via truck	Enclosed sheds; Retainer storage area	Retainers via Berth 6

### 2.2.3 Fertiliser

In an amendment to L4275/1972/15 (Amendment Notice 2, issued 21 January 2019) fertilisers were included as authorised granular product to be handled at the site, to be consistent with other category 58 licences.

In the submitted amendment application, the handling of fertiliser is proposed. Historically, the following fertiliser products have been imported: urea, potash based fertiliser (muriate of potash, sulphate of potash) and phosphate/potassium carbonate based fertilisers (monoammonium phosphate, diammonium phosphate, single super phosphate, ALLRCH and NKP). Import volume fluctuates yearly and depends on agricultural industry requirements such

as seasonal variability and climatic factors. An increase from 100 000 – 120 000 tonnes to 150 000 tonnes per year in 2021 is estimated. Table 3 lists the proposed fertiliser products and details on handling.

**Table 3 Fertiliser products**

Product	Particle size distribution (PSD)	Transport	Storage	Handling
Fertilisers	0.03 mm- 20 mm	Via truck	No storage	Hoppers and grabs via Berth 6 or Berth 2

### 3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guidance Statement: Risk Assessments* (DER 2017).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

#### 3.1 Source-pathways and receptors

##### 3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this amendment report are detailed in Table 4 below. Table 4 also details the proposed control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

**Table 4: Licence holder controls**

Emission	Sources	Potential pathways	Proposed controls
Dust	Handling of mineral sands, clean fill, fertilisers	Air/windborne pathway	<ul style="list-style-type: none"> <li>Monitoring wind conditions during ship loading events</li> <li>Ambient air quality monitoring program as per current licence conditions</li> <li>Prompt clean up of any spillage</li> <li>Covered truck trailers</li> <li>Dust collectors and dust extraction systems at truck unloader</li> <li>Enclosed or windshielded conveyors with dust extraction systems at conveyor feed and discharge points</li> <li>Control system to prevent overloading of conveyors preventing spillages</li> <li>Dust extraction and suppression systems fitted to transfer points and ship loaders</li> <li>Post-shipment Berth clean-ups</li> <li>Spill deflector plates installed during unloading operations</li> </ul>
			<p>Mineral sand concentrate (MSC):</p> <ul style="list-style-type: none"> <li>Maintaining DEM levels (3-8.5%) for MSC</li> <li>Rotainer handling method for MSC minimising dust emissions</li> <li>No on site storage</li> </ul>
			<p>Clean fill:</p> <ul style="list-style-type: none"> <li>Sands (non-silica) stored in enclosed sheds and handled via Berth 5 or Berth 4 ship loader</li> <li>Gravel stored in enclosed sheds or open stockpiles (depending on PSD/low fines content) and handled via Berth 5 or Berth 4 ship loader</li> <li>Stockpiles shielded from prevailing winds with fencing and sprays used for dust suppression</li> <li>Clay stored in enclosed sheds or retainer storage area and handled in retainers via Berth 6</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
			Fertilisers: <ul style="list-style-type: none"> <li>Fertilisers handled via hopper and grab on Berth 6 or Berth 2</li> </ul>
Noise			<ul style="list-style-type: none"> <li>Compliant with <i>Environmental Protection (Noise) Regulations 1997</i></li> <li>Environmental noise surveys undertaken</li> </ul>
Contaminated surface water runoff		Direct discharge resulting in adverse impacts on water quality and marine ecology	<ul style="list-style-type: none"> <li>Potentially contaminated stormwater treated prior discharge (sediment and pollutant traps)</li> <li>Spill containment measures (bundling, curbing)</li> <li>Wash down water from handling equipment captured within kibbles and Humeceptors</li> <li>Vacuum trucks used to recover contaminated water and sediments for offsite disposal at approved location or returned to mine sites</li> <li>Collecting product spillages within premises preventing access to marine environment</li> <li>Ambient marine sediment monitoring program as per current licence conditions</li> <li>Spill plates on berths during unloading operations</li> </ul>
Contaminated wash water runoff			
Naturally occurring radioactive material (NORM)	Handling of mineral sands	Air/windborne pathway causing impacts to health  Direct discharge into marine environment	<ul style="list-style-type: none"> <li>Rotainer handling method minimising dust emissions</li> <li>Designated waste disposal receptacles and clean up equipment</li> <li>Prompt clean up of any spillage</li> <li>Monitoring wind conditions during ship loading</li> <li>Maintaining DEM levels (3-8.5%)</li> <li>Material handling according to Radiation Management Plan (approved by DMIRS)</li> <li>No product storing on site</li> </ul>



### 3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the licence holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 5 and Figure 1 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guidance Statement: Environmental Siting* (DER 2016)).

**Table 5: Sensitive human and environmental receptors and distance from prescribed activity**

Human receptors	Distance from prescribed activity
Residential premises	840 m – 900 m from Berth 6 (MSC export) and Berth 4/5 (Clean fill)
Light industry neighbours	700 m south of Berth 6 400 m south of Berth 4 & 5 Clean fills (sand)
Fishing boat harbour	220 m west of Berth 6
Environmental receptors	Distance from prescribed activity
Marine environment	Premises borders on marine environment



**Figure 1: Distance to sensitive receptors**

Licence: L4275/1982/15

IR-T15 Amendment Report Template v2.0 (July 2020)

## 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the licence holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the licence holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the licence holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 6.

The Revised Licence L4275/1982/15 that accompanies this amendment report authorises emissions associated with the operation of the Premises i.e. increase of the daily throughput to be reflective of the actual current handling and the bulk handling of mineral sands concentrate, clean fills and fertiliser.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

**Table 6. Risk assessment of potential emissions and discharges from the premises during operation**

Risk Event					Risk rating <sup>1</sup> C = consequence L = likelihood	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls			
Operation							
Cat 58 and 58A: Increase of daily throughput to 160 000 tonnes	Dust	Air/windborne pathway causing impacts to health and amenity	Residential and light industry neighbours approx. 400 m-900 m from proposed activities	Refer to section 3.1.1	C = Slight L = Unlikely <b>Low Risk</b>	N/A	No additional conditions required as this amendment only reflects actual current throughput.
Handling of mineral sands: Received in retainer boxes and unloaded onto vessel			Fishing boat harbour approx. 200 m west	Refer to section 3.1.1	Marine environment	C = Moderate L = Possible <b>Medium Risk</b>	<u><b>Condition 1.3.5</b></u>
	Noise		Residential and light industry neighbours approx. 400 m-900 m from proposed activities.		C = Slight L = Unlikely <b>Low Risk</b>	N/A	No significant increase of noise emissions are expected from proposed activities. No additional conditions required as previous worst case noise modelling reflecting the current maximum annual throughput which remains the same with this amendment, has shown compliance with the <i>Environmental Protection (Noise) Regulations 1997</i>
	Naturally occurring radioactive material (NORM)		Residential and light industry neighbours approx. 400 m-900 m from proposed activities Fishing boat harbour approx. 200 m west Marine environment		C = Minor L = Unlikely <b>Medium Risk</b>	N/A	Product is handled via rotaboxes and is regulated under <i>Radiation Safety Act 1975</i> .
	Contaminated surface water runoff	Direct discharge resulting in adverse impacts on water quality and marine ecology Marine environment	C = Minor L = Possible <b>Medium Risk</b>		<u><b>Condition 1.3.5</b></u>	Proposed controls deemed sufficient to mitigate potential discharge into marine environment.	

Licence: L4275/1982/15

Risk Event					Risk rating <sup>1</sup> C = consequence L = likelihood	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls			
Handling of clean fill (e.g. construction sand)	Dust	Air/windborne pathway causing impacts to health and amenity	Residential and light industry neighbours approx. 400 m-900 m from proposed activities Fishing boat harbour approx. 200 m west Marine environment	Refer to section 3.1.1	C = Minor L = Unlikely <b>Medium Risk</b>	<u>Condition 1.3.5</u>	Proposed controls deemed sufficient to mitigate potential impacts from dust emissions when handling clean fill.
	Contaminated surface water runoff	Direct discharge resulting in adverse impacts on water quality and marine ecology	Marine environment		C = Minor L = Possible <b>Medium Risk</b>		Proposed controls deemed sufficient to mitigate potential discharge into marine environment.
Handling of fertilisers	Dust	Air/windborne pathway causing impacts to health and amenity, adverse impacts on water quality and marine ecology	Residential and light industry neighbours approx. 400 m-900 m from proposed activities Fishing boat harbour approx. 200 m west Marine environment	Refer to section 3.1.1	C = Minor L = Unlikely <b>Medium Risk</b>	<u>Condition 1.3.5</u>	Proposed controls deemed sufficient to mitigate potential impacts from dust emissions when handling fertiliser.
	Contaminated surface water runoff	Direct discharge resulting in adverse impacts on water quality and marine ecology	Marine environment		C = Moderate L = Possible <b>Medium Risk</b>	<u>Condition 1.3.5</u> <b>Parts of Condition 3.2.1, Table 3.2.2</b> <u>Condition 3.2.3, Table 3.2.3</u>	Refer to section 3.4

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

Note 2: Proposed licence holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.



### 3.3 Detailed risk assessment for dust emissions from mineral sands concentrate handling

MSC handling has been subject to a works approval, which authorised up to 5 shipments under time limited operations.

An overview of the completed shipments to date is shown in Table 7. Prior to the amendment for the additional shipments, a compliance report was submitted 28 August 2020 reporting no non-compliance with conditions listed in W6329/2019/1 after the initial two shipments.

Another compliance report was submitted 5 January 2021 confirming no non-compliances during shipment 3 and 4.

**Table 7: Overview of shipments authorised under W6329/2019/1**

Shipment	Shipment date	Tonnes	Product moisture [%]	Reports received
1	25 – 28 June 2020	10 005	6.1	Pre- and post-shipment notification (condition 3 and 4)  Compliance report shipment 1 and 2; 3 and 4 (condition 5 and 6)
2	12 – 14 August 2020	10 500	5.93	
3	21 – 23 October 2020	10 484	5.55	
4	7 – 9 December 2020	10 257	4.67	
5	Estimated 30 January 2021	N/A	N/A	N/A

As part of this licence amendment application the licence holder proposes the following modifications to the controls applied in W6329/2019/1:

- Removal of the 10 500 tonnes per shipment limit
- Modification of the moisture content requirements to 3-8.5 % (averaged over shipment) as during time limited operations some rotainer boxes with moisture contents as low as 3 % indicated low dust risk

Under W6329/2019/1, the moisture content was required to be 4-8.5 % averaged over shipment. While the licence holder reports that selected individual rotainer boxes showed moisture contents as low as 3 % with low dust risk, the required average over shipment was still complied with. The proposed new average minimum moisture content of 3 % would therefore result in individual retainers potentially being well below 3 %, while still meeting the proposed average.

MSC contains naturally occurring radioactive material (NORM) which presents potential risk to human health if exposed for prolonged periods of time and risk to the marine sediments within the commercial harbour from windblown dust. While radiation aspects are managed under the *Radiation Safety Act 1975*, dust emissions are considered in this assessment.

Uncertainties of potential dust emissions resulting from the requested removal of the 10 500 tonnes per shipment limit and the decrease of the minimum average moisture content of 3 % remain. No dust impacts have been reported during time limited operations with an average moisture content of MSC of 4-8.5 %.

#### 3.3.1 Rating of this risk event

The Delegated Officer considers the consequence of dust emissions impacting the marine environment and human health and amenity resulting from the handling of unknown quantities of MSC per shipment as **Moderate**.

Without a limit of tonnage per shipment, it needs to be ensured potential dust emissions are managed appropriately. The Delegated Officer considers the likelihood of dust impacts to marine environment and human health as **Possible**.

The Delegated Officer has compared the consequence and likelihood of this risk event and determined the overall rating as **Medium**. Based on this rating, the risk event is subject to some regulatory controls.

### 3.3.2 Regulatory controls

For the handling of MSC with no set tonnage per shipment, it is required that an appropriate moisture content is maintained. Based on findings from TLO under W6329/2019/1, an average of 4-8.5 % over shipments has proven to be suitable in mitigating potential dust emissions from the handling.

## 3.4 Detailed risk assessment for fertiliser discharge into the marine environment

The licence holder proposes to handle fertiliser at the premises. This includes following products:

- Urea
- Potash based fertilisers:
  - Muriate of Potash (MOP); and
  - Sulphate of Potash (SOP)
- Phosphate & Potassium Carbonate based fertilisers:
  - Monoammonium phosphate, MAP & Mapszc;
  - Diammonium phosphate, DAP & Dapszc;
  - Single super Phosphate, SSP;
  - ALLRCH; and
  - NKP (Vigour)

Fertilisers are proposed to be handled via hopper and grab on Berth 6 and Berth 2. Spill plates are used on the Berths to minimise discharge into the marine environment.

A dedicated mobile washdown area to clean equipment used for fertiliser handling will be applied at the relevant Berth when unloading fertiliser. Contaminated wash water is captured within kibbles, recovered by vac truck and removed off site to an approved location.

Stormwater is managed and treated via underground pipelines, drainage basins, soak wells, roadside curbing and diversion drains with stormwater treatment devices including silt traps, filter pits, hydrocarbon traps and gross pollutant traps. Stormwater is finally discharged into the marine environment.

Most fertilisers, in particular nitrate and ammonia compounds, are readily soluble when entering the marine environment. Marine waters are generally nitrogen deficient, which can result in algal blooms within the port waters when exposed to these nutrients. The effect may not be immediate, but can become apparent several days after exposure. Both nitrate and ammonia are known toxicants at high concentrations.

Phosphate is soluble, but unlikely deficient in marine waters resulting in a lower risk of algal blooms. However, it has a higher risk of accumulation in sediments than nitrate and ammonia.

Due to the high solubility of fertiliser products, contaminated stormwater and runoff from spills may be directly discharged into the marine environment. Monitoring as set out in L4275/1982/15 is currently limited to sediment monitoring and does not require stormwater discharge or marine water monitoring.

Due to the nature of fertiliser, additional monitoring is required to capture potential impacts on the marine environment. No controls have been proposed by the licence holder. The current licence lists 15 stormwater emission points discharging into the marine environment. While condition 1.2.5 of L4275/1982/15 requires that all practical measures to prevent stormwater run-off becoming contaminated by activities, no monitoring is undertaken to confirm if those measures are appropriate.





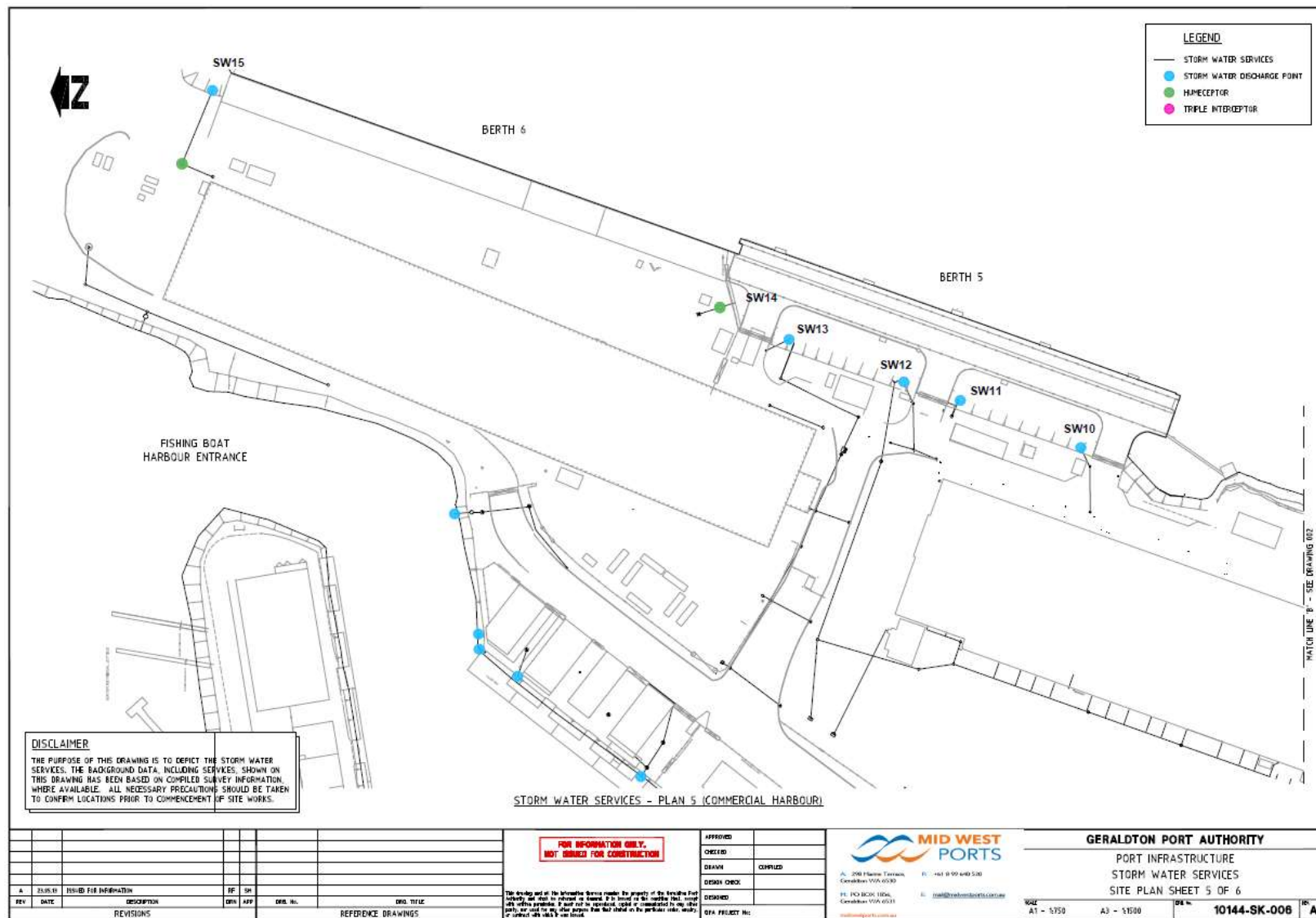


Figure 3 Stormwater discharge points and Humeceptor sampling locations Berth 5 and 6

Licence: L4275/1982/15

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### 3.4.1 Historical monitoring and background

The stormwater drainage network captures the area of the port, and a significant area outside of the prescribed premises. This includes light industry, heavy haulage and residential properties.

Stormwater monitoring has been undertaken periodically since 2000, and results were reported to the department in annual environmental reports. In 2009 a more comprehensive monitoring program was introduced, which consisted of 15 sample locations, and biannually measurements of a range of analytes such as pH, total; suspended solids, metals and nutrients (nitrogen, phosphorus). Locations included sampling near Berth 2 (SW05) and Berth 6 (SW14). Results were reported to the department until 2012, and indicated no ecological harm to the marine environment at this point in time. However, in the 2011/2012 Environmental Monitoring Report (Geraldton Port Authority, 2012), significantly higher levels of total phosphorous (23 mg/L) and total nitrogen (3.9 mg/L) were detected at SW05 (near Berth 2) during early winter.

Currently no conditions on the licence require the licence holder to monitor nutrients in stormwater discharge or marine environment.

According to the licence holder, Geraldton Port is anticipating a project consolidating the historical stormwater infrastructure to gain a holistic overview and which will inform future plans to find suitable engineering solutions to monitor water quality at key locations within the stormwater network.

### 3.4.2 Regulatory controls

Monitoring nutrient levels in stormwater discharge is required to ensure no fertiliser is entering the marine environment, resulting in algal blooms and affecting oxygen levels.

Ammonia and nitrate are soluble and are required to be monitored in the stormwater discharge relevant to Berth 2 and Berth 6, where fertiliser is handled.

While phosphate is soluble, it is more likely to accumulate in the sediment than ammonia or nitrate.

Due to other activities outside of the premises boundary potentially impacting the stormwater quality, pinpointing impacts from fertiliser handling at the premises may be difficult. While the department takes present challenges into account, some monitoring to ensure no adverse impacts on the marine environment is required.

Until a more adequate solution has been found as part of the Geraldton Port project referred to above, conditions will require the licence holder to monitor for nutrients at the relevant stormwater discharge locations (Humeceptors) (SW05a for Berth 2 and SW14 for Berth 6, **Error! Reference source not found.**, Figure 3) on a campaign basis.

Further, phosphate has been added to the current sediment monitoring program.

## 4. Consultation

Table 8 provides a summary of the consultation undertaken by the department.

**Table 8: Consultation**

Consultation method	Comments received	Department response
City of Geraldton advised of proposal (7/12/2020)	N/A	N/A

Licence holder was provided with draft amendment on (16 February 2021)	Refer to Appendix 1
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## 5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

### 5.1 Summary of amendments

Table 9 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised licence as part of the amendment process.

**Table 9: Summary of licence amendments**

Condition no.	Amendments
Front page	Assessed production / design capacity per amended to 160 000 tonnes per day (cumulative)
Premises description and licence summary	Addition of fertilisers and clean fill to list of regulated bulk granular products
1.3.3	Addition of clean fill and fertiliser to spillage collection.
1.3.5, Table 1.3.1	Addition of operational requirements for mineral sands concentrate
3.2.1, Table 3.2.2	Addition of phosphate as parameter to be monitored in sediment
3.2.3, Table 3.2.3	Condition reflecting monitoring of stormwater discharge at relevant Berths for Nitrogen and Ammonia on campaign basis.
4.2.1, Table 4.2.1	Addition of stormwater monitoring to be included in Annual Environmental Report

## References

1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
2. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Mid West Ports Authority, November 2020, Licence amendment application (A1951090)
5. Mid West Ports Authority, August 2020, 30 day report Silica Sand Trial (DWERDT327605)
6. Mid West Ports Authority, August 2020, Compliance Report for W6329/2019/1 shipments 1 and 2 (A1928371)
7. Mid West Ports Authority, January 2021, Compliance Report for W6329/2019/1 shipments 3 and 4 (DWERDT398240)
8. Geraldton Port Authority, 2012, 2011/2012 Environmental Monitoring Report (DWERDT405996)

## Appendix 1: Summary of licence holder's comments on risk assessment and draft conditions

Condition	Summary of licence holder's comment	Department's response
Condition 3.2.3, Table 3.2.3	<p>Terminology 'on campaign basis'; clarification regarding if monitoring is required only at Berth 2 OR Berth 6 dependant on which Berth is being used for unloading of fertiliser.</p> <p>Proposed change of wording:</p> <p>SW05 (Berth 2) <del>and</del> <u>or</u> SW14 (Berth 6) as per Schedule 1: Maps</p>	<p>Agreed, it was the department's intent to require monitoring only at the relevant Berth which is used for fertiliser handling.</p> <p>Text in Table 3.2.3 amended to:</p> <p>SW05 (Berth 2) <del>and</del> <u>or</u> SW14 (Berth 6) as per Schedule 1: Maps</p>
	<p>The licence holder proposes to sample from the Humeceptors rather than the stormwater outlets at Berth 2 and/or 6. Stormwater outlets are located under the Berths via boat access and may not be accessible during certain tide and surge conditions.</p> <p>Humeceptors have a holding capacity prior discharging into marine environment via the stormwater outlet. Sampling from the Humeceptors can be achieved during each fertiliser shipping campaign and will be a representative water sample. The licence holder provides an updated schematic of the proposed sampling locations.</p> <p>The licence holder noted that fertilisers are not unloaded during wet weather, due to their soluble nature.</p>	<p>Amended to reflect the new sampling locations (Humeceptors). The relevant amendment report section has been updated to reflect Humeceptors being acceptable to be sampled.</p>
Condition 3.2.3, Table 3.2.3 and Schedule 1: Maps	<p>The licence holder proposed to change the sampling location SW05 (Berth 2) to SW05a which is considered more suitable for sampling at Berth 2. SW05 is connected to an offsite stormwater catchment, which includes discharge which the licence holder has no control over. SW05a is linked to the Berth dedicated drainage system and is fitted with a Humeceptor.</p> <p>An updates schematic is provided by the licence holder, showing the sampling locations.</p>	<p>Amended.</p> <p>Text in Table 3.2.3 amended to:</p> <p>SW05a (Berth 2) <del>and</del> <u>or</u> SW14 (Berth 6) as per Schedule 1: Maps</p> <p>Amended to reflect the more representative sampling location SW05a. Additional figures showing the Humeceptor and correct sampling locations have been included in the amendment report and in the licence- Schedule 1: Maps, under Maps of stormwater infrastructure and sampling locations.</p>
Amendment report,	The licence holder requests to clarify the reference to minimum handling method 3 (MHM3) as set out in Appendix C of the Guideline: Port	Amended to reflect the MHM3 requirements for loading activities only.

Condition	Summary of licence holder's comment	Department's response
section 2.2.2	Authority bulk handling trials. MHM3 has requirements for unloading and loading of product, and no unloading activities are undertaken.	

## Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY					
<b>Application type</b>					
Works approval	<input type="checkbox"/>				
Licence	<input type="checkbox"/>	Relevant works approval number:		None	<input type="checkbox"/>
		Has the works approval been complied with?		Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?		Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Date Report received:			
Renewal	<input type="checkbox"/>	Current licence number:			
Amendment to works approval	<input type="checkbox"/>	Current works approval number:			
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L4275/1972/12		
		Relevant works approval number:		N/A	<input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>
Date application received		6/11/2020			
<b>Applicant and Premises details</b>					
Applicant name/s (full legal name/s)		Mid West Port Authority			
Premises name		Geraldton Port			
Premises location		Part of Lot 503 on Deposited Plan 57801 Volume: LR3157 Folio: 232 Street Address: Lot 503 Marine Terrace, West End			
Local Government Authority		City of Greater Geraldton			
<b>Application documents</b>					
HPCM file reference number:		2011/000451-3			
Key application documents (additional to application form):		Application form Supporting information document Cover letter			
<b>Scope of application/assessment</b>					



Summary of proposed activities or changes to existing operations.	<u>Licence amendment for:</u> <ul style="list-style-type: none"> <li>• Increase of daily throughput to 160 000 tonnes/day to reflect actual current throughput</li> <li>• Addition of following products for bulk handling: <ul style="list-style-type: none"> <li>○ Mineral Sands Concentrate – currently subject to W6329</li> <li>○ Clean fills (sands)- currently subject to trial</li> <li>○ Fertiliser- used to be on licence- to be re added</li> </ul> </li> </ul>	
<b>Category number/s (activities that cause the premises to become prescribed premises)</b>		
<b>Table 1: Prescribed premises categories</b>		
Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)
<p>Category 58: Bulk material loading or unloading: premises on which clinker, coal, ore, ore concentrate or any other bulk granular material (other than salt) is loaded onto or unloaded from vessels by an open materials loading system</p> <p>Category 58A: Bulk material loading or unloading: premises on which salt is loaded onto or unloaded from vessels by an open materials loading system.</p>	<p>Assessed –</p> <p>44 000 tonnes/day (cumulative)</p> <p>16 000 000 tonnes per year (cumulative)</p>	<p>Amendment proposed to daily throughput-</p> <p>160 000 tonnes/day (cumulative)</p>
<b>Legislative context and other approvals</b>		
Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<p>Referral decision No:</p> <p>Managed under Part V <input type="checkbox"/></p> <p>Assessed under Part IV <input type="checkbox"/></p>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><b>Geraldton Port Enhancement (2002)</b></p> <p>Ministerial Statement No: 600</p> <p>EPA Report No: 1050</p> <p><b>Proposed Geraldton Port Expansion (1989)</b></p> <p>Ministerial Statement No: 87</p> <p>EPA Report No: 411</p> <p><b>Geraldton Port Expansion (1994)</b></p> <p>Ministerial Statement No: 367</p> <p>EPA Report No: 752</p>
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:

Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	N/A
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i> )	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Port Authorities Act 1999 (WA); Port Authorities Regulations 2001 (WA)
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A

Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A