Amendment Report

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L4476/1984/12

Licence Holder Fremantle Port Authority

ABN 78 187 229 472

File Number DER2015/002744-1

Kwinana Bulk Terminal

Premises Riesley Road, KWINANA BEACH, WAS 6167

CITY OF KWINANA

Lot 452 on Plan 220690, Part of Lot 11 on Deposited Plan 39572 and Lot A within Lot 251 and Lot C within Lot 250 on

Deposited Plan 415974

As defined by the Premises maps attached to the Revised

Licence

Date of Report 18 April 2023

Decision Revised licence granted

Lauren Edmands
MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES

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

Table of Contents

1.	Decis	cision summary1						
2.	Scope	e of as	sessment	1				
	2.1	Regula	atory framework	1				
	2.2	Applica	Application summary					
		2.2.1	Construction	1				
		2.2.2	Operation	2				
3.	Risk a	assess	sment	3				
	3.1	Source	e-pathways and receptors	3				
		3.1.1	Emissions and controls	3				
		3.1.2	Receptors	5				
	3.2	Risk ra	atings	7				
4.	Consi	ultatio	n	10				
5 .	Concl	usion		10				
	5.1	Summ	pary of amendments	10				
Refe	rences	S		11				
Арр	endix 1	1: Sum	nmary of Licence Holder's comments on risk assessment a	and				
App	endix 2	2: App	lication validation summary	13				
			stockpile locations (for Gypsum, Nut coke and Granulated Slag) and					
propo	osed alt	ernate	import circuit	2				
-	4 1 .							
			older controls					
			numan and environmental receptors and distance from prescribed ac	•				
			ssment of potential emissions and discharges from the Premises dur peration					
Table	e 4: Cor	nsultatio	on	10				
Table	e 5: Sun	nmary o	of licence amendments	10				

1. Decision summary

Licence L4476/1984/12 is held by Fremantle Ports Authority (Licence Holder) for the Kwinana Bulk Terminal (the Premises), located on Riseley Road, Kwinana Beach 6167 on Lot 452 on Plan 220690, Part of Lot 11 on Deposited Plan 39572 and Lot A within Lot 251 and Lot C within Lot 250 on Deposited Plan 415974.

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 construction and operation of the Premises. As a result of this assessment, Revised Licence L4476/1984/12 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises.

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 Application summary

On 20 December 2022, the Licence Holder submitted an application to the department to amend Licence L4476/1984/12 under section 59 and 59B of the *Environmental Protection Act* 1986 (EP Act). The following amendments are being sought:

- Construction of a new alternate import circuit for granulated slag, nut coke and gypsum;
- Change in location of granulated slag, nut coke and gypsum stockpiles;
- Use of existing infrastructure reinstating IC04 conveyor (will require installing 3 new conveyor support trestle and shortening IC06 conveyor – southern section of IC06 utilised to reinstate IC04)
- Installing new conveyor transfer chute at IC06/RC02; and
- Replacing conveyor rollers, conveyor belt and repairing conveyor gear box.

Noting that there will be no changes to the assessed capacity of this instrument, and production will not exceed 50,000 tonnes per day.

Other changes to the instrument initiated by the department through this amendment will include:

- Changes to the trial notification conditions to include handling method.
- Minor administrative changes to reflect updated licence template.

2.2.1 Construction

The construction on this alternate import circuit will utilise existing infrastructure that is currently on the premises but is not reflected in the operating licence L4476/1984/12. The construction aspect of this amendment is estimated to take roughly 2-3 months to install.

This alternate circuit will utilise existing conveyors IC05 and IC06. Conveyor IC04 will need to be reinstated. The reinstatement of IC04 will include installation of three new conveyor support

trestles and using parts of the southern section of IC06 frame. Conveyors IC04, IC05 and IC06 will have wind shields fitted as part of this amendment.

A conveyor transfer chute will be installed between the modified IC06 conveyor and the existing RC02 conveyor. All existing infrastructure will undergo maintenance to ensure they are functioning correctly. This will involve replacing conveyor rollers, conveyor belt and repairing conveyor gear boxes.

Noting there will be no changes to how the cement clinker is handled or stored onsite through this amendment. After the construction of the new cement clinker import circuit (approved under works approval W6427/2020/1), a licence amendment will be required to incorporate these changes to the premises infrastructure.

All conveyors and conveyor transfer chutes will be installed to minimise dust suppression. Figure 1 shows the new alternate import circuit and the proposed location of the new stockpiles for nut coke, gypsum and granulated slag. This will replace the existing location for the iron ore and coal stockpile. Due to this there is existing stormwater infrastructure constructed for this stockpiling area which can be noted in the licence.



Figure 1: Proposed stockpile locations (for Gypsum, Nut coke and Granulated Slag) and proposed alternate import circuit.

2.2.2 Operation

The changes to be sought through this licence amendment will only have implications on the circuit for which gypsum, nut coke and granulated slag will be imported through and the location of the stockpiles.

As a result of this alternative circuit, the new import route will be identical before reaching IC03 where material was stockpiled at the previous location. Instead, the imported product will travel down conveyors IC02 \rightarrow IC04 \rightarrow IC05 \rightarrow IC06 \rightarrow RC02, as illustrated in Figure 1.

There will not be any significant changes to the operational conditions of the licence.

Current licence conditions to manage the potential emissions and discharges related to this operation are:

- Monitoring regimes:
 - Dust monitoring at existing dust monitoring locations; and
 - Cockburn sound Marine environment monitoring;
- The use of a water truck to be utilised to control any visible dust-lift from stockyards; and
- Existing stormwater drainage system around the stockpile area that ensures all stormwater from the stockpile area will drain to an unlined infiltration basin.

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 *Guideline: Risk* assessments (DWER 2020).

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 construction and operation which have been considered in this Amendment Report are detailed in Table 1 below. Table 1 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls	
Construction				
Dust	 Reinstating / modifying conveyors; Constructing conveyor chute; and Vehicle and machinery movement 	Air/windborne pathway	 Sweeper truck to remove dust, spilt and accumulated material; and Water cart onsite and operational to wet all trafficable areas within prescribed premises and stockpile if required; Existing conditions: Dust monitoring and reporting requirements (Reportable event criteria (≥260 µm/m³/day). Occupational Health and Safety (OH&S) noise limits and personnel noise monitoring program. 	

Emission	Sources	Potential pathways	Proposed controls
Contaminated stormwater	Discharge to surface water from stockpiles	Direct discharge to environment	Site stormwater drainage network with no direct discharge to Cockburn Sound – project footprint drains to Area C stormwater infiltration basin;
			Stormwater drainage network inspected by licensee personnel (environmental Advisor);
			Incident response procedure including recording, investigation and actioning of incidents;
			Cockburn sound monitoring defined in licence – annual monitoring of water quality, sediment and mussels for contaminants;
			Construction environmental management plan to be provided by contractor and approved by Fremantle Ports prior to works commencing.
Operation			
Particulate matter	Generation of dust from material transfer	Air/windborne pathway	Conveyor chutes will be fully enclosed;
	points (chutes) and conveyors • During loading on to		Conveyors will be covered with top wind shields / conveyor covers;
	trucks for removal off site		Sweeper truck to remove dust, spilt and accumulated material;
			Water cart onsite and operational to wet all trafficable areas within prescribed premises and stockpile if required;
			Adequate moisture content of products on arrival to berth reducing potential for dust lift off from product;
			Inspected by licensee personnel (Environmental Advisor); and
			Planned preventative maintenance and pre / post shipping inspections of infrastructure and equipment.

Emission	Sources	Potential pathways	Proposed controls
			 Existing conditions: Dust monitoring and reporting requirements (Reportable event criteria (≥260 μm/m³/day).
	Generation of dust from stockpiles		Existing conditions: Sprinklers located on the southern side of the new stockpile location.
Noise	Operation of alternative circuit.	Air / windborne pathway	OH&S noise limits and personnel noise monitoring program
Contaminated stormwater	Contamination of stormwater from stockpiles	Stormwater runoff into environment	 Stockpile drainage design and maintenance; Site stormwater drainage network – the receival stockyard drains to the Area C stormwater infiltration basin; Stockpile & Stormwater drainage network inspected by licence personnel; Incident response procedure including recording, investigation and actioning of incidents; Cockburn sound monitoring defined in licence – annual monitoring of water quality, sediment and mussels for contaminants; and Material characterisation – physical and chemical properties of cargo present a very low environmental risk to

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), 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 2 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 (Guideline: Environmental siting (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Nearest residential receptor	3,130m south-east from prescribed premises boundary. Screened out due to distance.
Industrial neighbours	 600m north-east from prescribed premises boundary; 660m south-east from prescribed premises boundary; and 980m south-west from prescribed premises boundary.
Environmental receptors	Distance from prescribed activity
Proclaimed State Environmental Policy area State Environmental Cockburn Sound Policy Boundary 2005, 9	<u>Cockburn Sound</u> (Moderate Ecological Protection) – within (loading jetty) and directly adjacent to the premises boundary.
Threatened/Priority fauna	Identified through department's GIS mapping system. The following were sighted within 1km of the prescribed premises boundary: • Neelaps calonotos (black-striped snake, black-striped burrowing snake) P3; • Isoodon fusciventer (Quenda) P4. Following sighted within 2km of the prescribed premises boundary: • Synemon gratiosa (graceful sunmoth) P4; • Idiosomo sigillatum (Swan Coastal Plan shield-backed trapdoor spider) P3; • Calyptorhynchus banksii naso (Forest red-tailed black cockatoo) Vulnerable; • Cakyptorphynchus sp (white-tailed black cockatoo) Engandered; • Lerista lineata (Perth slider, lined skink) P3; • Thalassarche chrysostoma (Grey-headed albatross) Vulnerable; • Caretta caretta (Loggerhead turtle) Endangered. Considering this premises falls within the Kwinana Industrial Area (KIA) and there are many surrounding operations, noise emissions from this premises may be difficult to isolate, and long-term dwellings of fauna in this area of high activity is unlikely.
RIWI Act 1914 Groundwater Proclamation area	Cockburn Groundwater Area. Note: Licence Holder have GWL 163607(3) to take 40,000kL pa from Cockburn, Perth – Superficial Swan aquifer for the purpose of dust suppression for earthworks and construction purposes.
Acid Sulfate Soils	Acid Sulfate Soil Risk – Derived; Risk class 3 = No known risk.

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) 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 incomplete 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 3.

The Revised Licence L4476/1984/12 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. construction and operation of an alternative import circuit.

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

Table 3. Risk assessment of potential emissions and discharges from the Premises during construction and operation

Risk Event			Risk rating ¹ Licence		hardCood on for			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Construction								
	windborne pathway Impact: Smothering of vegetation an impacts to human health and amenities	pathway Impact:	Cockburn sound	Refer to 3.1.1	C = Minor L = Unlikely Low Risk	Y	Condition 16 & 17: Dust monitoring with reportable event Condition 26: Conveyors constructed with wind shields and chute to be full	N/A
Activities:		vegetation and		Refer to 3.1.1	C = Minor L = Unlikely Low Risk	Y	enclosed. Condition 26: Sweeper trucks and water cart to control dust during construction.	N/A
 Reinstatement of IC04 conveyor (involving modification to IC06); Construction of new transfer chute to tie in IC06 to RC02; Earthworks; and Vehicle movements. 	Noise	Pathway: air / windborne pathway Impact: impacts to human health and amenities	Industrial neighbours (3 within 1km)	Refer to 3.1.1	C = Minor L = Rare Low Risk	Y	N/A	N/A
	Contaminated stormwater	Pathway: direct discharge to ground Impact: contamination of marine habitat	Cockburn Sound	Refer to 3.1.1	C = Moderate L = Unlikely Medium Risk	Y	Existing Condition: Condition 10 & 11: Maintain stormwater infiltration basins	N/A

Risk Event			Risk rating ¹	Licence		Justification for			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	additional regulatory controls	
Operation									
	е	windborne		/ Industrial	Refer to 3.1.1	C = Minor L = Rare Low Risk	Υ	N/A	N/A
Unloading of material at transfer points – i.e on to conveyors and transfer chutes		Impact: to human health and amenities	neighbours (3 within 1km)	Refer to 3.1.1	C = Minor L = Unlikely Low Risk	Υ	Condition 16 & 17: Dust monitoring with reportable event	N/A	
		Pathway: air / windborne pathway Impact: contaminating of marine habitat		Refer to 3.1.1	C = Moderate L = Possible Medium Risk	Υ	Updated Table 9: Wind shields on all conveyors.	N/A	
			Cockburn Sound	Refer to 3.1.1	C = Moderate L = Unlikely Medium Risk	Y	Existing Table 9: sprinklers on southern side of stockpiles	N/A	
Source: New stockpile area	Contaminated stormwater	Pathway: direct discharge to ground Impact: contaminating of marine habitat	Cockburn Sound	Refer to 3.1.1	C = Moderate L = Unlikely Medium Risk	Y	Existing Condition: Condition 10 & 11: Maintain stormwater infiltration basins	N/A	

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk assessments (DWER 2020).

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

4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Local Government Authority (City of Kwinana) advised of proposal 22 February 2023.	None received.	N/A
Licence Holder was provided with draft amendment on 11 April 2023.	Refer to Appendix 1	Refer to Appendix 1

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 5 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 5: Summary of licence amendments

Condition no.	Proposed amendments
Cover page	New amendment date and addition of prescribed premises category description table.
Explanatory notes	Deleted to reflect updated licence template.
Definitions	Addition of new and updated definitions.
Interpretation	Minor updates to reflect updated licence template.
Conditions 4 - 22	Changes to condition numbering due to addition on new conditions (2-25).
Referencing	Changes to condition and table number referencing within document to reflect changes.
2b)	Addition of "Commencement Date
2c)	Updated Trial notification condition to include handling method.
4	Updated Trial notification conditions.
5a)	Updated Trial notification conditions.
6e)	Updated Trial notifications conditions.
8	Updated Trial notification conditions.

Condition no. Proposed amendments				
9	Updated Trial notification conditions to include handling method.			
26	New construction condition for infrastructure under this amendment.			
27	Requirement to submit Environmental compliance report.			
28 Requirements of the Environmental compliance report.				
Figure 4	Figure of new proposed alternative import circuit constructed under this amendment.			
Figure caption	Addition of captions to all figures and relevant referencing throughout licence.			

References

- 1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 3. DWER 2020, Guideline: Risk Assessments, Perth, Western Australia.

Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response
26(c), Table 6, Rows 1-4, column 2, item (b).	Licence holder requests to update the wording for item (b) to include: b) Sweeper trucks to remove dust, spilt and accumulated material 'from all trafficable areas'.	The department accepts this change.
Condition 28(c)	Licence holder requests to change the wording from: "be signed by a person authorised to represent the 'works approval holder' and contains the printed name and position of that person" to 'licence holder'.	The department notes this administrative error and accepts this change.
Schedule 2, Table 7, Row 9, Column 2	Licence holder has requested to retain the import route of "T1, IC01, T2, IC02 and IC03 (to import shed)" until such time the new cement clinker import circuit is constructed under W6427/2020/1.	The department accepts this change to keep the import route "T1, IC01, T2, IC02 and IC03 (to import shed)" on the licence, noting the addition of the Alternate Import Circuit "T1, IC01, T2, IC02, IC04, IC05, IC06 and RC02 (to stockpiles)".
Schedule 3, Table 8, Row 1, Column 1	Licence holder requests to remove "IC02" as required to have wind shields as it is not fitted on this conveyor and cannot as the Import Stacker moves along this conveyor.	The department accepts this change.

Appendix 2: Application validation summary

SECTION 1: APP	SECTION 1: APPLICATION SUMMARY						
Application type							
Amendment to		Current licence number:	L4476/1984/12				
licence		Relevant works approval number:	W6427/2020/1 (new cement clinker import circuit)				
Date application recei	ved	20 December 2022					
Applicant and Pre	mises	details					
Applicant name/s (full name/s)	legal	Fremantle Ports Author	prity (ABN 78 187 229 472)				
Premises name		Kwinana Bulk Termina	al (KBT) facility				
Premises location		Lot 452 on Plan 22069 1 Riseley Road, Kwina	90 and Part of Lot 11 on plan 39572 ana Beach, WA 6167				
Local Government Authority		City of Kwinana					
Application docum	nents						
HPCM file reference number:		DER2015/002744-1	DER2015/002744-1				
Key application documents (additional to application form):		Supporting documents: Attachment 2: Prescribed premises map with proposed infrastructure; Attachment 3B: design drawings; Attachment 6A: proponent's risk assessment; and Attachment 10: fee calculator.					
Scope of applica	tion/a	assessment					
Summary of proposed activities or changes to existing operations.		Use existing infra infrastructure; New infrastructure (gypsum, granulate) No change to currer tonnes/day Construction: Reinstating IC04 construction: Reinstating IC06 construction: Conveyor windshiel General maintenangear boxes; and Construction of new Operation: Process flow: Product unloaded Product transported to IC01 → IC04 → I From IC06, product chute; Product stockpiled were prod					

Category number/s (activities that cause the premises to become prescribed premises) Table 1: Prescribed premises categories

	Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)
	Category 58: bulk material loading or unloading: premises on which clinker, coal, ore, ore concentrate of any other bulk granular material (other than salt) is loaded onto or unloaded from vessels by an open materials loading system.	Assessed capacity of 550,000 tonnes per annum for combined: gypsum, granulated slag and nut coke. Assessed capacity: 9,950,000 tonnes per annum for all Category 58 and 58A activities.	No changes.
	Category 58a: bulk material loading or unloading: premises on which salt is loaded onto or unloaded from vessels by an open materials loading system.	Not related to this amendment	N/A.

Legislative context and other approvals

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 □	No ⊠	
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes □	No ⊠	
Has the proposal been referred and/or assessed under the EPBC Act?	Yes □	No ⊠	
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ⊠	No □	Certificate of title □ General lease □ Expiry: Mining lease / tenement □ Expiry: Other evidence □ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes □ N/A ⊠	No 🗆	Approval: Expiry date: If N/A explain why? "The proposal involves utilizing existing conveyors IC05 and IC06 and reinstating previously installed conveyor IC04".
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes □	No ⊠	CPS No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes □	No ⊠	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.

Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes ⊠ No □	Application reference No: Licence/permit No: GWL163607(3)
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes □ No ⊠	Name: Type: Has Regulatory Services (Water) been consulted? Yes □ No □ N/A ☒ Regional office: Note: Premises lies on top of Cockburn Proclaimed Groundwater Area
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes □ No □ N/A ⋈
Is the Premises subject to any other Acts or subsidiary regulations (e.g. Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx)	Yes ⊠ No □	Rights in Water and Irrigation Act 1914
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes ⊠ No □	Kwinana
Is the Premises subject to any EPP requirements?	Yes ⊠ No □	Site is subject to SO ₂ and Total Suspended Particulates requirements of Kwinana EPP.
Is the Premises a known or suspected contaminated site under the Contaminated Sites Act 2003?	Yes ⊠ No □	Classification: contaminated – restricted use (C–RU) Date of classification: 7 November 2008