



Application for Works Approval

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

Works Approval Number W2915/2025/1

Applicant Fremantle Port Authority

File number INS-0002915

Premises

Kwinana Bulk Jetty
Port Road
KWINANA BEACH WA 6167
Lot 4552 on Plan 220690; and
Portion of Lot 497 on Plan 35196

Date of report 27 March 2025

Proposed Decision Works approval granted

Table of Contents

1. Decision summary	3
2. Scope of assessment.....	3
2.1 Regulatory framework	3
2.2 Application summary and overview of premises	3
2.2.1 Background and overview of premises.....	3
2.2.2 Application	3
2.2.3 Exclusions.....	4
3. Risk assessment	4
3.1 Source-pathways and receptors	4
3.1.1 Emissions and controls	4
3.1.2 Receptors	5
3.2 Risk ratings	6
4. Consultation	8
5. Conclusion.....	8
References	8
Table 1: Proposed applicant controls	4
Table 2: Sensitive human and environmental receptors and distance from prescribed activity.....	5
Table 3: Risk assessment of potential emissions and discharges from the premises during construction	7
Table 4: Consultation	8
Figure 1: Distance to sensitive receptors	6

1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction of the premises. As a result of this assessment, works approval W2915/2025/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) 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 and overview of premises

2.2.1 Background and overview of premises

Kwinana Bulk Jetty (the Premises) is located about 20 km south of Fremantle. The Premises comprises two shipping berths and associated infrastructure including conveyor systems and transfer towers. The berths are known as Kwinana Bulk Berth 3 (KBB3) and Kwinana Bulk Berth 4 (KBB4), which accommodate ships handling sulphur, fertilisers and a range of other bulk products operating under Licence L4474/1976/14. Both berths also provide facilities to handle various types of bulk liquid commodities, including petroleum, that are not regulated under the categories 58 or 58A under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations). The conveyor system servicing KBB3 is utilised by an external operator and excluded from the prescribed premises.

A structure fire in February 2024 caused major damage to conveyors CV3, CV5 and CV6 and Transfer Towers T3 and T4. The entirety of the import system (CV1, T1, CV2, T2, CV3, T3, CV5, T4 and CV6) has been out of commission since the fire. Conveyors CV5, CV6 and Transfer Tower T4 were required to be demolished following the fire and are not planned to be rebuilt.

2.2.2 Application

On 5 December 2024, Fremantle Port Authority (the 'applicant') submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act), to undertake construction works for replacement of CV3 and T3 relating to unloading of sulphur from vessels at the premises. T3 will tie into CV4 which belongs to an adjacent operator (Minara), with CV4 excluded from the prescribed premises. The applicant has advised that they intend to request the department remove the demolished infrastructure from the Licence via licence amendment following construction works.

The infrastructure has been designed to enable the import of 675,000 tonnes of sulphur per year as authorised under Licence L4474/1976/14, which is held by the applicant and authorises ongoing operations at the premises. In the interim, sulphur imports have continued to be unloaded via the Siwertell through bellows (chutes) to trucks on KBB4 and sulphur is the only material currently proposed for import via the conveyor system. Sulphur will be unloaded from a vessel at KBB4 via the existing Siwertell unloader and transferred along existing infrastructure (CV1 conveyor, T1 transfer station, CV2 conveyor and T2 transfer station) to the proposed infrastructure (CV3 conveyor and T3 transfer station). It will then be transferred to the off-site CV4 conveyor and existing sulphur storage shed. Import of other materials approved under the Licence that were previously handled by the Siwertell and conveyor system have continued to be unloaded via ships grab and hoppers to trucks under Licence L4474/1976/14. These materials are expected to continue to be unloaded via this method, as required.

The CV3 conveyor and T3 transfer station will be installed in the same location as that specified in

Licence L4474/1976/14. The CV3 conveyor will be enclosed, designed with aluminum cladded walls and roof ('Kinder' conveyor covers) and an under-floor stainless steel spill tray that is sloped to direct spills and washwater to a 600 L sump and 5,000L tank via a gutter. The T3 transfer station will be enclosed with aluminum cladded walls and roof and concrete flooring that is sloped to direct washwater to a 6,000 L sump.

No environmental commissioning is proposed. The applicant will undertake wet commissioning to test that all systems and components of the plant and equipment have been built and installed correctly and are operating according to the specifications of the plant or equipment.

The premises relates to the categories and assessed production / design capacity under Schedule 1 of the EP Regulations which are defined in Works Approval W2915/2025/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020a) are outlined in Works Approval W2915/2025/1.

2.2.3 Exclusions

The applicant requested a time-limited operation (TLO) period for the proposed infrastructure. Following a review of the existing licence, the Delegated Officer has identified that the proposed infrastructure (CV3 and T3) is captured on the licence and determined that the controls specified in existing licence conditions are sufficient to mitigate potential risks to receptors during the operation of CV3 and T3. Therefore, the Delegated Officer considers that no amendment to the existing licence would be required to authorise the operation of CV3 and T3 and a TLO period would only serve to duplicate regulation of the proposed operations. Therefore, the proposed TLO period has been excluded from this assessment.

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 2020a).

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.

This assessment relates only to the construction of the proposed infrastructure (see section 2.2.3) given it is intended to replace infrastructure that was previously assessed and approved for operation under Licence L4474/1976/14.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Vehicle and plant movements	Air / windborne	Water cart onsite and operational to wet areas with potential dust lift-off

Emission	Sources	Potential pathways	Proposed controls
		pathway	Inspection by site personnel
Noise	Installation / construction of CV3 and T3	Air / windborne pathway	Site Occupational Health and Safety noise limits and personnel noise monitoring program
Sediment-laden stormwater	Stormwater runoff through construction areas	Surface water runoff to the marine environment	No direct discharge to Cockburn sound, with existing site stormwater drainage network precluding discharge to Cockburn sound Stormwater drainage inspected by site personnel

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020a), the Delegated Officer has excluded the applicant's employees, visitors, and contractors 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 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 (Guideline: Environmental Siting (DWER 2020b)).

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

Human receptors	Distance from prescribed activity
Residential premises	About 2.3 km southwest of the premises boundary
Environmental receptors	Distance from prescribed activity
Cockburn Sound, including marine waters, aquatic species, seagrasses, benthic habitats and communities (area subject to the <i>State Environmental (Cockburn Sound) Policy 2015</i>)	Within and adjacent to the premises boundary. The current licence has an extensive set of Cockburn Sound monitoring conditions.

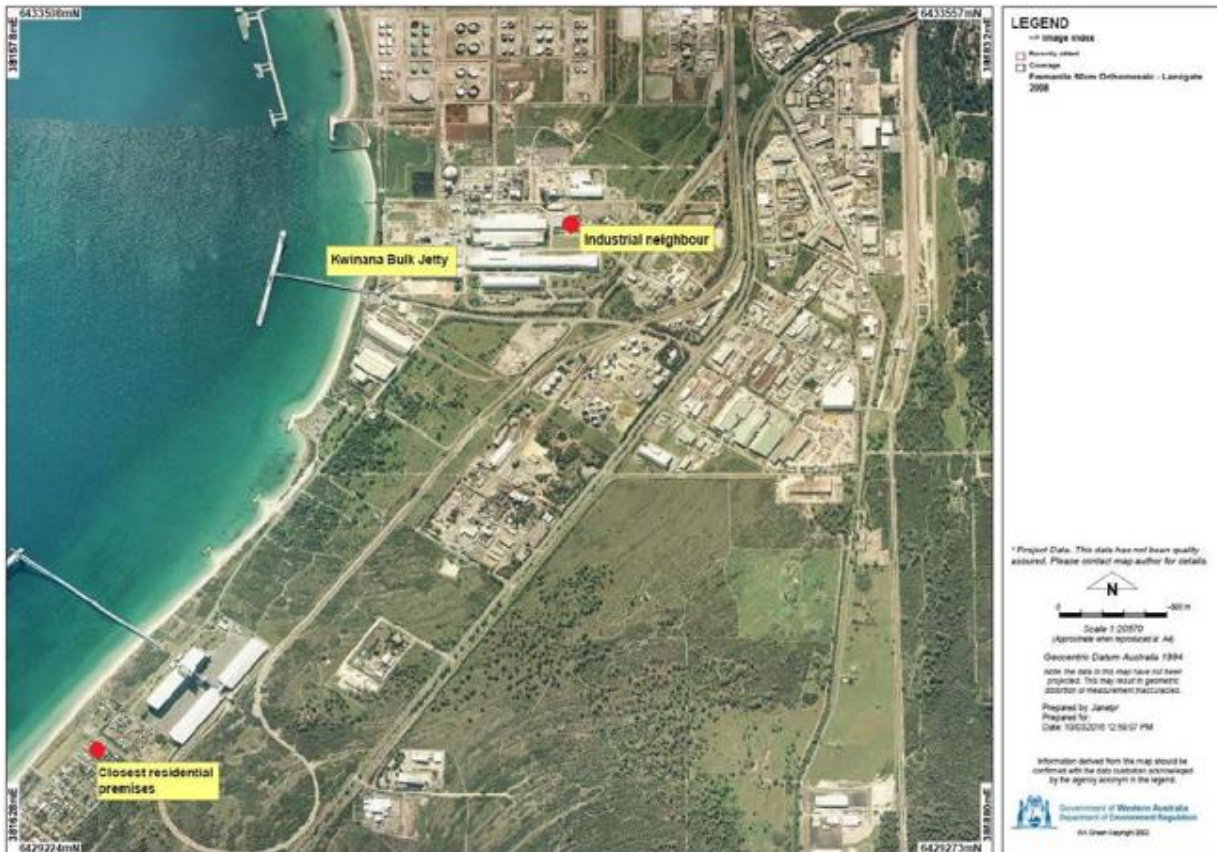


Figure 1: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020a) for each identified emission source and considers 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 applicant 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 applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Works Approval W2915/2025/1 that accompanies this decision report authorises construction only. The conditions in the issued works approval, as outlined in Table 3 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

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction								
Construction of CV3 and T3 including vehicle and plant movements	Dust	Pathway: Air/windborne Pathway Impact: Reduced marine water quality, adverse impacts to benthic communities, seagrasses and marine invertebrates	Marine waters and benthic communities of Cockburn Sound	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	Condition 1	N/A
	Noise	Pathway: Air/windborne Pathway Impact: Health and amenity	Residential receptors (closest 2.3 km from premises)	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	N/A	N/A Sufficiently managed under proposed construction controls and <i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
	Sediment-laden stormwater	Pathway: Overland flow Impact: Reduced marine water quality, adverse impacts to benthic communities, seagrasses and marine invertebrates	Marine waters and benthic communities of Cockburn Sound	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1	N/A Proposed stormwater and dust controls to mitigate spilled material risk and existing licence stormwater conditions are considered sufficient to mitigate potential impacts during construction.

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

Note 2: Proposed applicant 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
<i>Application advertised on the department's website on 3 March 2025</i>	<i>None received</i>	N/A
<i>Application advertised in the West Australian 13 March 2025</i>	<i>None received</i>	N/A
<i>Local Government Authority advised of proposal on 4 March 2025</i>	<i>None received</i>	N/A

5. Conclusion

Based on the assessment in this decision report, the Delegated Officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

References

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