



## Application for Works Approval Amendment

### Part V Division 3 of the *Environmental Protection Act 1986 (WA)*(CKI)

<b>Works Approval Number</b>	W6943/2024/1
<b>Works Approval Holder</b>	Fulton Hogan Construction Pty Ltd
<b>ACN</b>	010 240 758
<b>File Number</b>	APP-0027490
<b>Premises</b>	Rumah Baru Port Precinct  Legal description –  Part Lot 100 on Deposited Plan 18500  Certificate of Title Volume 2103 Folio 109  As defined by the premises map attached to the revised works approval
<b>Date of Report</b>	3 June 2025
<b>Decision</b>	Revised works approval granted

Steve Checker

**MANAGER, WASTE INDUSTRIES**

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

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## 1. Decision summary

Works Approval W6943/2024/1 is held by Fulton Hogan Construction Pty Ltd (Works Approval Holder) for the Rumah Baru Port Precinct (the Premises), located at Part Lot 100 on Deposited Plan 18500 Cocos (Keeling) Islands.

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 Works Approval W6943/2024/1 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 Application summary

On 7 February 2025, the Works Approval Holder submitted an application to the department to amend Works Approval W6943/2024/1 under section 59 and 59B of the *Environmental Protection Act 1986 (WA)* (CKI) (EP Act). The following amendments are being sought:

- Infrastructure described under Table 1, Item 1 in the works approval details design and construction/installation requirements at the Stilling Basin, a component of which consists of the pavement design of a 170 mm layer of Type 2.1 granular material. Due to operational constraints, Type 2.1 granular material is only able to be imported to the Premises once the Materials Offload Facility (MOF) is constructed and Time Limited Operations has commenced.
- Addition of details relating to the temporary refuelling areas at the Stilling Basin to the works approval.
- Finally, after reviewing on-site the turning radius for the site access road, it has become apparent that there is insufficient space, and as such a wider access point is required.
- The prescribed premises boundary requires minor amendment for to accommodate the turning radius for 12 m flat bed trucks and correspondingly all over-length cargoes to access the Stilling Basin works area.

Until such a time that the Type 2.1 granular material can be imported and installed, a polypropylene geogrid (Tensar Triax TX160, 390 kN/m @ 0.5% strain, 290 kN/m @ 2% strain) is proposed to achieve the appropriate bearing capacities to enable crane operations in the Stilling Basin for MOF construction.

Once installed, the geogrid will remain in situ, whereby the Type 2.1 granular material will be placed on top once available. Installation of infiltration trenches will be progressively undertaken, however final installation will not be possible until the Type 2.1 material can be imported.

Further details relating to the temporary refueling areas at the Stilling Basin will be incorporated into the works approval. During construction activities, an HDPE lined bunded area will be used as a designated refueling area, which will be covered when not in use to prevent any collection of rainwater.

It is noted that a self-contained washdown bay will be brought to the Stilling Basin once the MOF is constructed. This infrastructure will be considered in the subsequent licence application following time-limited operations.

### 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 Works Approval Holder has proposed to assist in controlling these emissions, where necessary.

**Table 1: Works Approval Holder controls**

Emission	Sources	Potential pathways	Proposed controls
<b>Construction</b>			
Dust	Vehicle movements, earthworks and construction of the Stilling Basin	Air/windborne pathway	- Controls are unchanged from those assessed in W6943/2024/1, issued 21 November 2024.
Noise	Vehicle movements, earthworks and construction of the Stilling Basin	Air/windborne pathway	- Controls are unchanged from those assessed in W6943/2024/1, issued 21 November 2024.
Sediment laden stormwater	Construction of the Stilling Basin	Overland runoff	- Controls are unchanged from those assessed in W6943/2024/1, issued 21 November 2024.
Hydrocarbons and chemicals	Vehicle movements, earthworks and construction of the Stilling Basin	Direct discharge to land	<ul style="list-style-type: none"> <li>- During temporary construction activities, an HDPE lined bunded area (0.5 m bund height) will be used as a designated refueling area.</li> <li>- Appendix D of the Environmental Management Plan contains a Refueling Operations Procedure.</li> <li>- The refueling area will be covered when not in use to prevent any collection of rainwater and will not be used during rainfall events.</li> </ul>
<b>Operation</b>			

Emission	Sources	Potential pathways	Proposed controls
Dust	Stockpiling of bulk materials within the Stilling Basin	Air/windborne pathway	- Controls are unchanged from those assessed in W6943/2024/1, issued 21 November 2024.
Noise	Stockpiling of bulk materials within the Stilling Basin	Air/windborne pathway	- Controls are unchanged from those assessed in W6943/2024/1, issued 21 November 2024.
Sediment laden stormwater	Stockpiling of bulk materials within the Stilling Basin	Overland runoff	- Controls are unchanged from those assessed in W6943/2024/1, issued 21 November 2024.
Hydrocarbons and chemicals	Plant and vehicle use through loading and unloading	Direct discharge to land	<ul style="list-style-type: none"> <li>- Appendix D of the Environmental Management Plan contains a Refueling Operations Procedure.</li> <li>- All refueling plant is to comply with AS1940:2017 and AS2809:2008 requirements, including emergency cut-off switches, automatic nozzle shut off mechanisms, stop valve at the nozzle end, signage etc.</li> <li>- During refuelling, appropriate spill containment controls are to be placed on the ground surface where there is the potential for any spills (e.g. spill mats, portable spill berms etc.).</li> <li>- Any spills, or material lost to the ground is to be immediately cleaned up and removed. This will involve collection of the contaminated material to its full extent and placement into a sealed/waterproof receptacle.</li> <li>- A self-contained washdown bay will be brought to the Stilling Basin once the MOF is constructed for use within the First Point of Entry (FPOE) facility.</li> <li>- The refuelling area will be covered when not in use to prevent any collection of rainwater and will not be used during rainfall events.</li> </ul>

### 3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Works Approval 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
West Island Town - Residential dwellings and holiday accommodation noise sensitive premises. Approximately 100 permanent residences.	3.2 km south of the premises.
Environmental receptors	Distance from prescribed activity
Cocos (Keeling) Island (CKI) Marine Park	The premises is located 300 m north of the CKI Marine Park within North Lagoon and 1.2 km north of the CKI Marine Park within main Lagoon.
Green Turtle ( <i>Chelonia mydas</i> ) and Hawksbill Turtle ( <i>Eretmochelys imbricata</i> ) The Green and Hawksbill Turtle are listed as Vulnerable under the EPBC Act.	Studies indicate that the West Island supports a high density of resident Green and Hawksbill Turtles although nesting activities of Green Turtles only occur occasionally, and not considered to occur for the Hawksbill turtle.
Hydrology - Freshwater lenses	West Island North Lens (approximately 400 m west of the premises)
Surface water – Indian Ocean	Surrounding the CKI
Seven migratory bird species Not recorded during recent field surveys, however they have been historically recorded on West Island (either as residents, annual migrants, or vagrants). CKI is the only seabird breeding area within a radius of 900 kilometres.	Some suitable habitat (nesting and foraging) is present within the prescribed premises boundary.

### 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 in-complete they have not been considered further in the risk assessment.

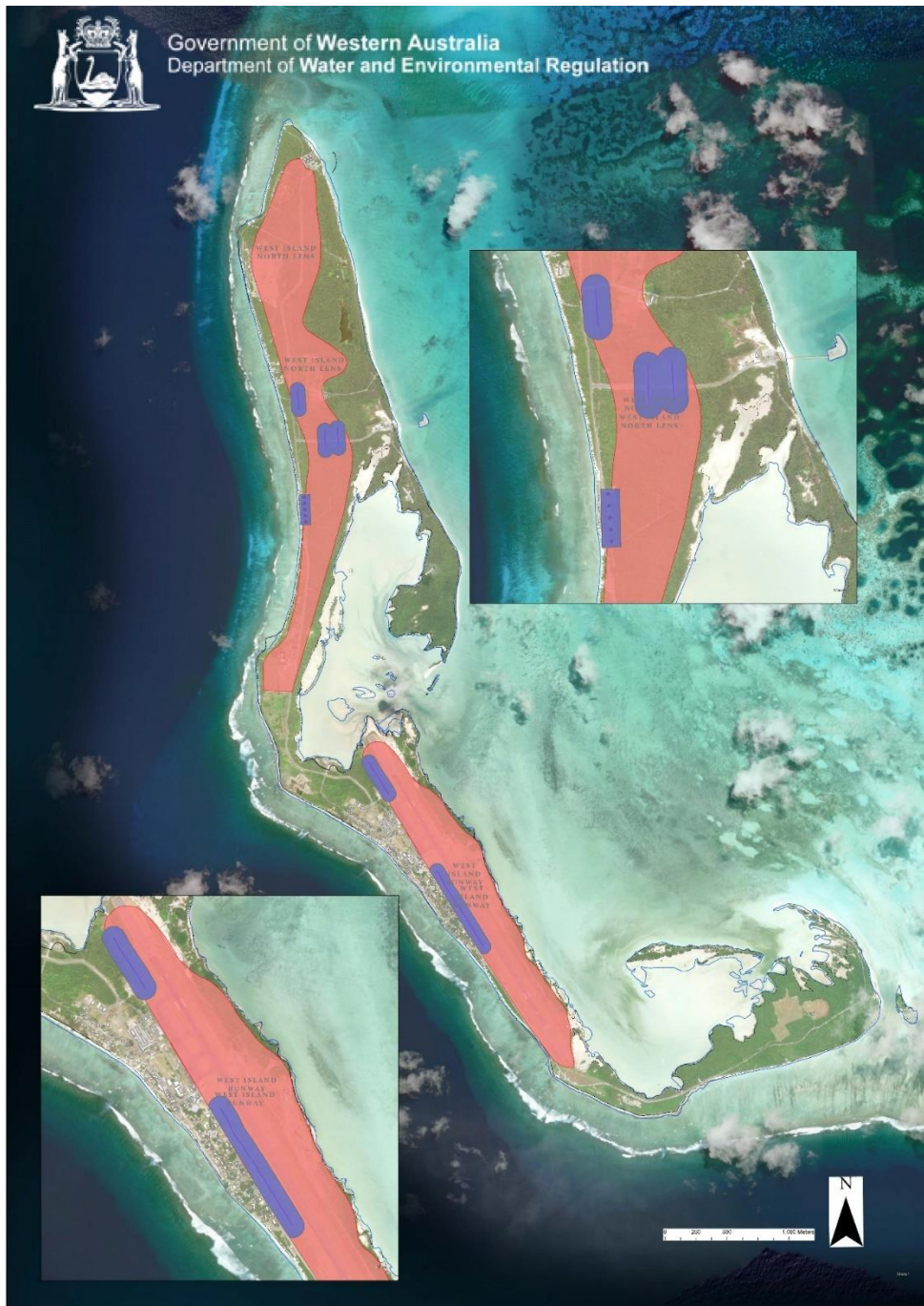
Where the Works Approval Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Works Approval Holder's proposed controls to be critical to maintaining an acceptable level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

Additional regulatory controls may be imposed where the Works Approval 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 Works Approval W6943/2024/1 that accompanies this Amendment Report authorises construction and time-limited operations. The conditions in the Revised Works Approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).



A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the Premises. A risk assessment for the operational phase has been included in this Amendment Report, however licence conditions will not be finalised until the department assesses the licence application.



**Figure 1: West Island Public Drinking Water Source Areas**

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

Risk Event					Risk rating <sup>1</sup>	Works Approval Holder's controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls	C = consequence L = likelihood			
Construction								
Vehicle movements, earthworks and construction of the Stilling Basin	Dust	Air/windborne pathway causing impacts to health and amenity	Vegetation (habitat)	Refer to Section 3.1.1	C = Minor L = Possible Medium Risk	Yes	Conditions 1-5	The Delegated Officer considers the controls assessed under Works Approval W6519/2021/1, issued on 21 November 2024, and existing works approval holder controls to be sufficient to mitigate dust emissions generated by construction activities.
	Noise	Air/windborne pathway and vibration through soils and underlying rock causing fauna disturbance and amenity impacts to residents	Residents Terrestrial and marine fauna	Refer to Section 3.1.1	C = Minor L = Likely Medium Risk	Yes	Conditions 1-5	The Delegated Officer considers the controls assessed under Works Approval W6519/2021/1, issued on 21 November 2024, and existing works approval holder controls to be sufficient to mitigate noise emissions generated by construction activities.
	Sediment laden stormwater	Overland runoff potentially impacting surface water quality causing ecosystem disturbance and impacts on surrounding vegetation (habitat) due to smothering	Benthic community Vegetation (habitat)	Refer to Section 3.1.1	C = Moderate L = Possible Medium Risk	Yes	Conditions 1-5	The Delegated Officer considers the controls assessed under Works Approval W6519/2021/1, issued on 21 November 2024, and existing works approval holder controls to be sufficient to mitigate contaminated stormwater emissions generated by construction activities.
	Hydrocarbons and chemicals	Direct discharge causing contamination of surface water causing ecosystem disturbance  Direct discharge causing contamination of coastal areas causing impacts on biological health and amenity	Terrestrial and marine fauna Groundwater	Refer to Section 3.1.1	C = Moderate L = Unlikely Medium Risk	Yes	Conditions 1-5	The Delegated Officer considers the controls assessed under Works Approval W6519/2021/1, issued on 21 November 2024, and existing works approval holder controls to be sufficient to mitigate hydrocarbon discharges generated by construction activities.
Operation (including time-limited-operations operations)								
Temporary storage of hydrocarbons Operating of plant and equipment	Hydrocarbons and chemicals	Direct discharge causing contamination of surface water causing ecosystem disturbance  Direct discharge causing contamination of coastal areas causing impacts on biological health and amenity	Residential Terrestrial and marine fauna	Refer to Section 3.1.1	C = Moderate L = Unlikely Medium Risk	Yes	Conditions 1-7 and 11-17.	The Delegated Officer considers the refueling area to be sufficient to contain and mitigate hydrocarbon discharges from the premises.
Stockpiling of bulk materials within the Stilling Basin	Dust	Air/windborne pathway causing impacts on vegetation health due to smothering	Vegetation (fauna habitat)	Refer to Section 3.1.1	C = Moderate L = Possible Medium Risk	Yes	Conditions 1-7, 16 and 17.	The Delegated Officer considers the controls assessed under Works Approval W6519/2021/1, issued on 21 November 2024, and existing works approval holder controls to be sufficient to mitigate dust emissions generated by stockpiling activities.
	Noise	Air/windborne pathway causing impacts to health and amenity	Residences Terrestrial Fauna	Refer to Section 3.1.1	C = Moderate L = Possible Medium Risk	Yes	Conditions 1-7, 16 and 17.	The Delegated Officer considers the controls assessed under Works Approval W6519/2021/1, issued on 21 November 2024, and existing works approval holder controls to be sufficient to mitigate noise emissions generated by stockpiling activities.



Risk Event					Risk rating <sup>1</sup>	Works Approval Holder's controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls	C = consequence L = likelihood			
Stockpiling of bulk materials within the Stilling Basin	Sediment laden stormwater	Overland runoff potentially causing impacts on surrounding vegetation (habitat) due to smothering  Overland runoff and direct discharge potentially causing reduced light emissions resulting in impacts to the benthic community	Vegetation (fauna habitat)  Benthic community	Refer to Section 3.1.1	C = Moderate  L = Possible  Medium Risk	Yes	Conditions 1-7, 16 and 17.	<p>Stilling Basin Geotechnical Report (Trinacria Consulting, 10 September 2024) details the appropriateness of the geogrid for the Stilling Basin. Based on the information available, the Delegated Officer considers that the proposed geogrid is appropriate for the gravelly sand, of carbonate and coralline nature, at the premises.</p> <p>Once installed, the geogrid will remain in situ, whereby Type 2.1 granular material will be placed on top once available to be imported.</p> <p>Installation of infiltration trenches will be progressively undertaken, but final installation will not be possible until the Type 2.1 material can be imported. This will not be able to occur until Time Limited Operations of the MOF facility commences. As such, temporary erosion and sediment controls will be utilised on site to maintain site drainage.</p> <p>Table 3 requires that contaminated stormwater must not be discharged from the premises.</p> <p>The Delegated Officer considers the installation and use of the proposed geogrid prior to Type 2.1 material installation to be sufficient to mitigate contaminated stormwater discharges from the premises.</p>

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

Note 2: Proposed Works Approval 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
Works Approval was provided with draft amendment on 14 April 2025	Incorrect reference to a row item within Table 4 to be amended.	The reference has been corrected.

## 5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a revised works approval 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 works approval as part of the amendment process.

**Table 5: Summary of works approval amendments**

Condition no.	Proposed amendments
Cover Page	Removal of reference to assessment of clearing of native vegetation as this activity was not assessed under works approval, but is assessed and regulated under Clearing Permit CPS 10428/1 issued under Part V Division 2 of the <i>Environmental Protection Act 1986</i> .
1	Correction of the reference to the Material Offload Facility.
5, Table 1	Changes to the construction requirements for the base of the Stilling Basin. Inclusion of the refuelling area requirements.
10	Addition of construction requirements for the base of the Stilling Basin.
11, Table 3	Changes to the specification for the base of the Stilling Basin. Inclusion of the refuelling area requirements.
17	Addition of compliance certification requirements for Condition 10.
Schedule 1, Figure 1	Prescribed premises boundary updated.
Schedule 1, Figure 3	Stilling basin compound figure updated.

## References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2019, *Guideline: Industry Regulation Guide to Licensing*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.