



Application for Works Approval

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

Works Approval Number	W6549/2021/1
Applicant	CPB Contractors Pty Limited
ACN	000 893 667
File number	DER2021/000219
Premises	Yanchep Rail Extension – Alkimos sand screening Legal description Lot 2, Plan P419385, Land ID 30029571 As defined by the premises maps attached to the issued works approval
Date of report	13 August 2021
Decision	Works approval granted

Lauren Edmands

MANAGER – RESOURCE INDUSTRIES

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

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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 W6549/2021/1 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

On 19 April 2021, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works relating to screening of material at the premises. The premises is approximately 40 km north of the Perth central business district.

The premises relates to category 12 and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6549/2021/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has been considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W6549/2021/1.

The Yanchep Rail Extension (YRE) Project is an extension to the Northern Suburbs Railways (also known as Joondalup line) in Perth's northern suburbs. It's approximately 40 km north of the Perth central business district and includes 14.5 km of railway beyond the existing Butler Station and three new stations at Alkimos, Eglington and Yanchep.

The subsurface conditions along the YRE route predominately comprise Safety Bay Sand and/or Tamala Sand, overlying Tamala Limestone. The subgrade conditions at the design base of the formation level comprise limestone or sand. The design of the YRE project required a considerable volume of this material to be cut from existing ground levels. In some instances, cutting passes through large and high sand dunes, with the depth of the cutting approximately 20 m from the surrounding ground level at its deepest.

A contract condition requires that the applicant reuse material extracted from the rail alignment in permanent and temporary construction works associated with the project. The applicant is therefore seeking approval to screen sand extracted from the YRE project rail corridor as part of cut operations using a screening plant.

The selected site has previously been cleared and is being used as a stockpile storage area under Development Approval 30-50401-1. A mobile screen and stacker will be brought onto site and positioned at nearby sand stockpile locations. A hardstand is already constructed, therefore no additional site preparatory works are required.

The equipment can screen up to 550 000 tonnes per annum. The applicant estimates approximately 100 000 tonnes will be screened for the single year of operation.

The operational activities associated with the project include the following:

- Use of a loader/excavator to load sand from nearby stockpiles into portable screening equipment;

- Screening of material;
- Stockpiling of screened material directly from equipment;
- Stockpile management using a loader;
- Loading of sand onto articulated dump trucks by loader/excavator;
- Cartage of sand to required locations within YRE footprint;
- Periodic spraying of water from carts onto pad and stockpiles.

2.3 Part IV of the EP Act

The overall YRE project was assessed under Part IV of the EP Act with two Ministerial Statements (MS) issued. MS 1100 was approved on 26 June 2019 and is for Part 1 of the YRE project (Butler to Eglington). Part 2 of the YRE (Eglington to Yanchep) was assessed under MS 1129, issued 14 April 2020. A section 45 application to MS 1120 led to the issuing of MS 1159 on 22 January 2021, with changes to conditions regarding environmental value offsets and rehabilitation offsets.

Both MS requires the proponent to minimise impacts from construction on flora and vegetation, landforms, terrestrial fauna and social surrounding. This includes the need to minimise impacts of noise and vibration during construction and operation of the railway. The conditions relating to noise and vibration, however, are not related to the construction and operation of the Alkimos screening plant. These emissions will be assessed under the Part V works approval.

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 decision report are detailed in Table 1 below. Table 1 also details the proposed 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	Equipment and infrastructure placement and associated vehicle movement.	Air / windborne pathway	A construction water bore and turkey's nest has been sited adjacent to the stockpile location to provide ready access to water as a dust suppressant. Daily visual monitoring for off-site dust evolution will be undertaken.

Emission	Sources	Potential pathways	Proposed controls
Noise and vibration	Equipment and infrastructure placement and associated vehicle movement.	Air / windborne pathway	Noise produced during the construction phase would be limited to the site establishment, which has largely been completed as part of other construction of activities associated with the construction of the YRE project (non-prescribed activities). These works would be undertaken during normal working hours.
Operation			
Dust	Screening of sand, vehicle movements, lift-off from stockpiles and/or stored product, earthworks etc.	Air / windborne pathway	<ul style="list-style-type: none"> • Daily visual monitoring for off-site dust evolution will be undertaken • Watering and wetting down of access roads and tracks as required. • Stockpiles to be wetted down by water cart where possible. • Consideration given to utilising a hydromulch for stockpiles generating dust for longer term dust minimisation. • Consideration will be given to utilising a dust suppression agent on access trucks if excessive dust generation becomes problematic. <p>In the event the project encounters complaints and issues with dust generation and the above measures do not resolve them, the following contingency measures may be applied:</p> <ul style="list-style-type: none"> • Further application of a chemical binding agent; • Installation of wind fencing; • Installation of automatic sprinkler systems on top of the stockpiles; • Installation of continuous dust monitoring units at problematic site boundaries to quantify dust levels.
Noise	Screening of material	Air / windborne pathway	<ul style="list-style-type: none"> • Day-time hours of operation only. No out of hours work without consent of the City of Wanneroo. • Use lowest noise work practices and equipment which meet the requirements of the job. • Broadband reversing alarms on construction vehicles and machinery in preference to 'beeper' reversing alarms. • Turning off plant and vehicles when not in use.

Emission	Sources	Potential pathways	Proposed controls
			<ul style="list-style-type: none"> Limiting unnecessary use of loud equipment, generation of unnecessary noise; the movement of vehicles on the facility footprint should be minimised where possible. Will operate in accordance with the Noise Regulations. Noise modelling undertaken to demonstrate compliance with the Noise Regulations. The acoustic report was submitted with the works approval application.
Leachate	Contaminated stormwater and runoff	Seepage to soil and groundwater	<ul style="list-style-type: none"> All stormwater will be entirely contained within the site via onsite infiltration to ensure there is no uncontrolled discharge outside the site. Stormwater diversion channels or bunds will be constructed to divert surface water flows, minimise soil erosion and trap and retain sediment within the site.

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), 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 2020)).

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

Human receptors	Distance from prescribed activity
Closest residential receptor	500 m to the north west
Residential receptor	600 m to the south
Residential receptor	800 m to the south west
Residential receptor	600 m to the south west
Environmental receptors	Distance from prescribed activity
Threatened Ecological Community – Banksia woodland of the SCP (EPBC TEC) - the YRE project boundary and stockpile location is fenced to prevent access outside of the approved	Areas approximately 450 m to the north west and 300 m to the north east Area approximately 600 m to the south

<p>disturbance areas.</p> <p>The area to the North West is geographically separated from the proposed screening works. The rail corridor is in between the TEC and screening site.</p>	
<p>Threatened Ecological Community – <i>Melaleuca huegelii</i> – <i>M. aerea</i> (<i>M. systema</i>) shrublands on limestone ridges (TEC) (SCP26a) – The YRE project boundary and stockpile location is fenced to prevent access outside of the approved disturbance areas.</p>	<p>Approximately 150 m to the south</p>
<p>Groundwater - Priority 3 (P3) – Perth Coastal and Gwelup Underground Water Pollution Control Area.</p> <p>The activity of screening is considered a compatible use within public drinking water source areas (PDWSAs) as documented in the department's Water Quality Protection Note (WQPN) no. 25 – 'Land use compatibility tables for public drinking water source areas'.</p>	<p>Within P3 area</p>

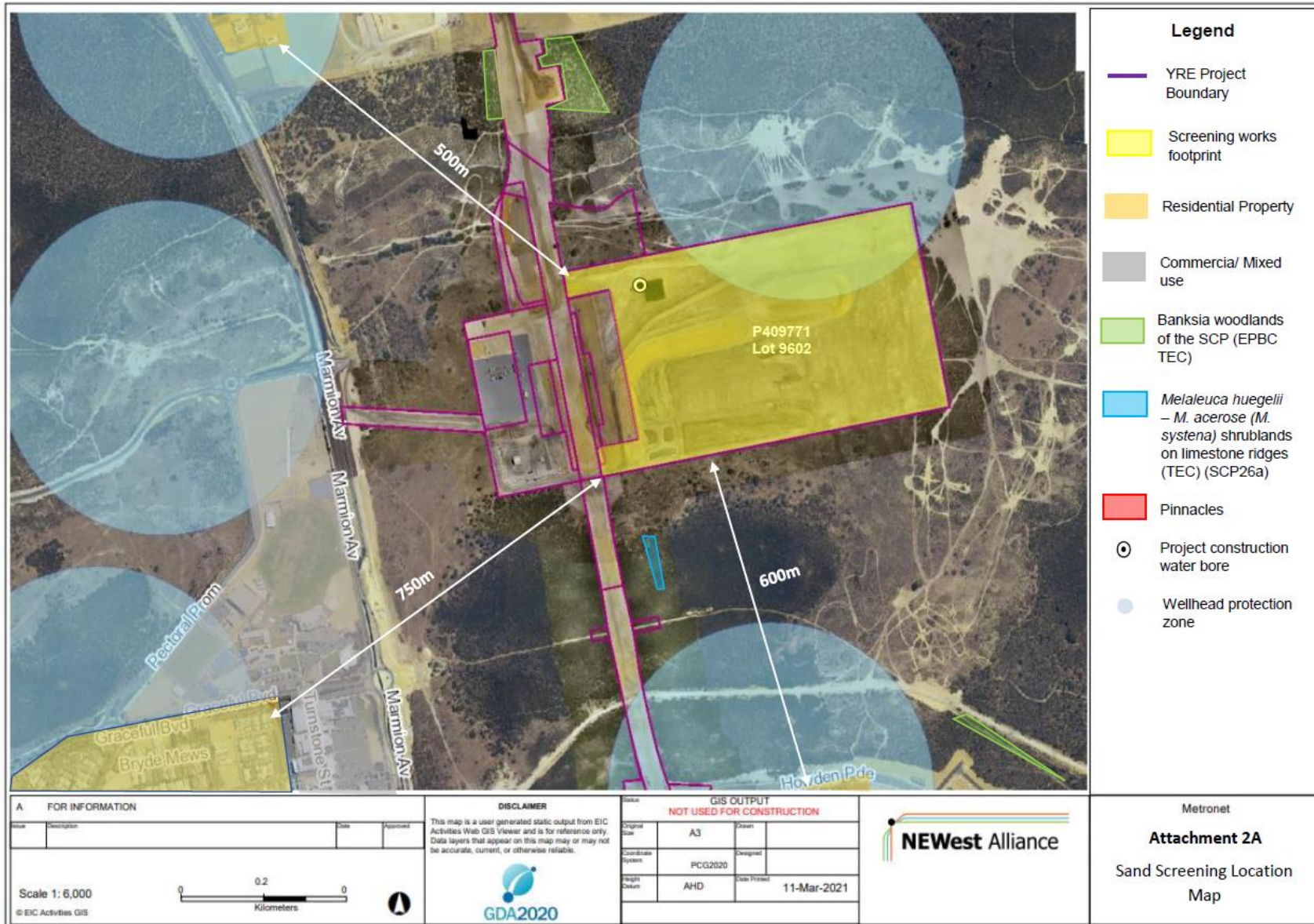


Figure 1: Distance to sensitive receptors

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3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source 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 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 W6549/2021/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 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 i.e. screening activities. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

Table 3: Risk assessment of potential emissions and discharges from the premises during construction and operation

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								
Placement of screen and associated equipment including vehicle movements (reversing beepers).	Dust	Air / windborne pathway causing impacts to health and amenity	Residences approximately 500 m to the north	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1 Conditions 2 and 3	Standard construction and reporting conditions apply
	Noise			Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1	N/A
Operation (including time-limited-operations operations)								
Screening, unloading, loading and storage of material Vehicle movements	Dust	Air / windborne pathway causing impacts to health and amenity	Residences approximately 500 m to the north	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 7 Conditions 4, 5, 17, 18 and 19	Standard construction and reporting conditions apply
	Noise	Air / windborne pathway causing impacts to health and amenity	Residences approximately 500 m to the north	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 4 and 5 Condition 6 Condition 7 - 19	Reporting conditions apply for noise monitoring during time-limited operations. As the proposed operation hours will be daytime only, the modelling needed to demonstrate compliance with daytime assigned noise levels only. The acoustic noise modelling provided by the applicant, was assessed by DWER' noise experts and is considered correct, predicting compliance with daytime assigned noise levels at all neighbouring noise sensitive receptors (the closest being 500 m from the premises). The works approval provides the applicant time limited operations for 180 days. During this limited operating time, the applicant is required to engage a person competent in noise assessment to monitoring and report the noise measurements to the department. The results of this noise

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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				
								assessment will inform the operational risk for noise emissions and be taken into account for the application made by the applicant to operate the premises under a licence. In the event that the noise monitoring program indicates that operations do not meet the assigned levels in the Noise Regulations, the applicant will be required to prepare a report outlining how they intend to resolve the issue/s to no longer exceed the assigned noise levels.
	Sediment laden stormwater	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	<i>Melaleuca huegelii</i> 150 m to the south of the premises. P3 groundwater area	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	Condition 1	N/A

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

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
Application advertised on the department's website on 7 June 2021	None received	N/A
City of Wanneroo advised of proposal on 10 June 2021	Letter received on 15 July 2021 stating the proposed works indicated on plans are consistent with the approved application grant by the Western Australian Planning Commission (WAPC) and that the City has no objections to the proposed works. It was also noted that the subject site is situated on land with Planning Control Area No. 132 Yanchep Line Extension (Alkimos) and therefore the WAPC is the agency responsible for determining the proposal.	WAPC approval granted and received with works approval application.
Department of Planning, Lands and Heritage advised of proposal on 10 June 2021	None received	N/A
Applicant was provided with draft documents on 28 July 2021	Refer to Appendix 1	Refer to Appendix 1

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. CPB Contractors Pty Ltd and Downer EDI Works Pty Ltd 2021, *New Works Approval Application*, Perth, Western Australia
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.

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

Condition	Summary of applicant's comment	Department's response
Condition 7	<p>The applicant requests modification of item three indicating that the "screening area must be bunded and drain in such a way that clean surface water run-off will be directed away from the processing areas". The screening area falls within the stockpile site with a perimeter in excess of 2,000m where screening will occur in a number of locations within the area using mobile equipment.</p>	<p>The condition has been modified to specify screening plant rather than the entire processing area: "Clean surface water run-off will be directed around screening plant, equipment and machinery, so as to avoid hydrocarbon contamination."</p> <p>DWER has also modified condition 1 which has similar drainage specifications.</p>

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)				
Application type				
Works approval	<input checked="" 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 type="checkbox"/>	Current licence number:		
		Relevant works approval number:		N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None <input type="checkbox"/>
Date application received		19 April 2021		
Applicant and premises details				
Applicant name/s (full legal name/s)		CPB Contractors Pty Ltd		
Premises name		Yanchep Rail Extension		
Premises location		Lot 9062 on Plan 409771 Volume/Folio 2914/425		
Local Government Authority		City of Wanneroo		
Application documents				
HPCM file reference number:		DER2021/000219		
Key application documents (additional to application form):		Location map Alkimost Stockpile and Dust Management Plan Rev 3 Alkimos Sand Screening Noise Assessment Indicative Layout Development Application Alkimos Stockpile Site		
Scope of application/assessment				

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)

Summary of proposed activities or changes to existing operations.

Construction of a mobile screen (Terex Finlay 883MKII Supertrak) and stacker (Edge RTS 9048) will be brought onto site and position at nearby san stockpile locations. A hardstand is already constructed therefore no additional site preparatory works required.

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Proposed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 12: Screening etc. of material	550 000 tonnes per annum	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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
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 checked="" type="checkbox"/> A Project Alliance Agreement is in place between the PTA and CPB Contractors PTY Limited and Downer EDI Works Pty Ltd to provide access to each portion of land forming the premises.
Has the applicant obtained all relevant planning approvals?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Approval: 30-50401-1 Expiry date: If N/A explain why? Approval by the Western Australian Planning Commission to commence development
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"/>	CPS No: N/A No clearing is proposed.

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
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"/>	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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Application reference No: Licence/permit No: GWL205181(1)
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"/>	Name: N/A Type: Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office:
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Name: Perth Coastal and Gwelup Underground Water Pollution Control Area. Priority: P3 Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	As part of the larger YRE project: <i>Aboriginal Heritage Act 1972</i> <i>Planning and Development Act 2005</i> <i>Dangerous Goods Safety Act 2005</i> <i>Rights in Water and Irrigation Act 1914</i> <i>Environmental Protection (Noise) Regulations 1997</i>
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"/>	Classification: N/A Date of classification: N/A