

Decision Report

Application for Licence

Part V Division 3 of the Environmental Protection Act 1986

Licence Number	L9314/2021/1
Applicant	Hanson Construction Materials Pty Ltd
ACN	009 679 734
File number	DER2021/000607
Premises	Hanson Hopeland 394 Hopeland Rad Hopeland WA 6125
	Legal description - Lot 137 on Deposited Plan 152967 Certificate of Title Volume 1668 Folio 739 As defined by the Premises maps attached to the Licence
Date of report	16 August 2022
Decision	Licence granted

Christine Pustkuchen 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

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the operation of the premises. As a result of this assessment, licence L9314/2021/1 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 25 October 2021, the applicant submitted an application for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application is to seek a licence relating to operating a mobile screening at the premises. The premises is approximately 15 km east of Port Kennedy.

The premises relates to the category and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L9314/2021/1. 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 2020) are outlined in licence L9314/2021/1.

The applicant has been operating at the premises under time limited operations of the works approval W6288/2019/1 which was amended to include time limited operations on 16 February 2021.

On 29 November 2021 the applicant submitted Equipment Noise Measurement and Attended Monitoring – Hanson Hopeland Sand Quarry, a noise verification compliance report in relation to the noise monitoring undertaken during time limited operations in order to meet the requirements of conditions 10-13 of the Works approval.

The Department's review of the report found that it partially met conditions 10 - 13 of the Works Approval. Additional clarification was required by the applicant. Further information was provided on 16 March 2022 and determined that it met the requirements of condition 10 - 13 of Works Approval W6288/2019/1.

The Department assessed the noise monitoring data and found that it indicates that noise emissions are likely to comply with the *Environmental Protection (Noise) Regulations 1997* during operations and that no additional ongoing noise monitoring is recommended for the premises.

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 operation 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
Operation			
Dust	Operation of mobile screening plant (including conveyor). Dust from movement	Air/windborne pathway	Screening plant will be fitted with dust suppression measures such as water sprays and dust shields.
	of front end loader, transport trucks and screening plant		size of the premises won't allow vehicles to gain speed.
	(including conveyor).		The applicant will employ a dedicated water cart (15,000L capacity).
			Trucks leaving the premises will have covered loads.
Noise	Operation of mobile screening plant (including conveyor).	Air/windborne pathway	Maintain a 20m vegetated buffer between the excavation area and the site boundary to provide a physical separation distance.
	Noise from movement of screen, front end loader and transport trucks, including reversing alarms on vehicles.		Maintain noise suppression devices (fitted with croakers) in good condition on all machinery.
			Machinery only to be operated between 7am and 5pm Monday to Saturday.
			All mobile vehicles (front end loaders, water trucks) are to be fitted with broadband reversing alarms.
			Mobile equipment is to be chosen to be the lowest noise equipment which meets the operational requirements.
			A noise assessment was carried out by Herring Strorer at the premises and has been assessed in the original works approval decision report. The noise assessment demonstrated that operations comply with the assigned levels specified in the <i>Environmental</i> <i>Protection (Noise) Regulations 1997</i> (EP Noise Regulations).
			A noise validation assessment was carried out by Wood PLC (a consultant firm qualified for environmental noise impact assessments) which was submitted to the department on 29 November 2021. The departments assessment of this report concluded that during operation of the premises noise

Emission	Sources	Potential pathways	Proposed controls
			emissions are likely to comply with the Environmental Protection (Noise) Regulations 1997 and that no ongoing noise monitoring is recommended for the premises.
			Operating hours restricted to daytime - 07:00 to 19:00, Monday through to Saturday.
Contaminated stormwater	Operations of screening plant. Sediment and hydrocarbons	Direct discharge	The applicant is proposing to screen in-situ sand which is a natural inert material. Any waste material not suitable for sale will be returned to the void in its unaltered natural state.
			Fuel will be transferred between a fuel truck and mobile screener. Fuel volumes limited to that of the mobile screen when used on a campaign basis.
			Post initial topsoil removal sand extraction will occur in pits at depth – once below ground level there will be no associated stormwater runoff away from the staged pits.
			Applicant will establish V-drains on access rods to divert uncontaminated stormwater away from screening pits.
Hydrocarbon discharge spill to land	Fuel transfer to mobile screening plant	Direct discharge.	No bulk fuel will be stored on site; storage volumes will not exceed 5,000 litres. Fuel will be transferred between a fuel truck and mobile screener. There will not be underground fuel pipes etc. The fuel storage tank will be self- bunded and contained spill kits.
			Any spill that resulted in contaminated soil will be immediately excavated and removed from 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
Residential receptors	150m east – directly east of Stage 4 / Stage 1 boundary as per Figure 2.

	475m north east of Stage 4 north boundary as per Figure 2.
	550m north east of Stage 4 northern boundary as per Figure 2.
	675m north west form Stage 2 / Stage 4 western boundary as per Figure 2.
	650m north east of Stage 4 / Stage 1 boundary as per Figure 2.
	730m south east of Stage 1 southern boundary as per Figure 2.
	1180m south west of Stage 3 western boundary as per Figure 2.
Environmental receptors	Distance from prescribed activity
Threatened Ecological Communities and Priority Ecological Communities	Banksia dominated woodlands of the Swan Coastal Plain; Priority 3 – within premises.
Threatened/Priority Fauna	<i>Isoodon fusciventer</i> (southwester brown bandicoot) - 465m north east of northern premises boundary
	Calyptorhynchus latirostris (Carnaby's cockatoo) – 425m south east of south eastern premises boundary
Groundwater	Depth to groundwater encountered at approximately 19m AHD (based on information within works approval W6288/2019/1).
	Land owner has GWL178117 for annual entitlement of 16600kL for domestic use, irrigation of up to 0.2ha of lawns and garden and 3ha of pasture and stock watering.
	GWL152631- 190m north of northern premises boundary.
	GWL159625 – 220m north east of northern stage 4 boundary.
	Numerous bores located within 1km of premises (based on available GIS dataset –WIN Groundwater Sites).
Surface water	Watercourses - Canal north east and south east from northern top of premises boundary
	Watercourses - 480m north of northern boundary
Contaminated Sites	Lot 371 immediately south – Incomplete Report
Geomorphic wetland	
Unknown - Palusplain	Western boundary of proposed pits.
Unknown - Dampland	80m from eastern boundary of premises
Bush Forever: Regional open space or proposed regional open space	Site 378 – 2.4km west of premises South Western boundary
RIWI Act - Groundwater	Serpentine Groundwater Area
Soil type classification	Sandplain and broad extremely low rises with imperfectly drained deep or very deep grey siliceous sands.
	Extremely low to very low relief dunes, undulating sandplain and discrete sand rises with deep bleached grey sands with an intensely coloured yellow B horizon within 1m of the surface.



Figure 1: Distance to sensitive receptors

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 licence 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.

Licence L9314/2021/1 that accompanies this decision report authorises emissions associated with the operation of the premises i.e. Category 12 screening activities.

The conditions in the issued licence, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

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Risk events					Risk rating ¹	Applicant		
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Operation								
Operation of Mobile Screening Plant (including conveyor) Vehicle movements	Dust	Air / windborne pathway causing impacts to health and amenity	Residential premises located 150m east of the premises.	Refer to Section 3.1.1	C = Moderate L = Unlikely Medium Risk	Ν	Condition 2 Condition 3	Prevailing 9am and 9pm winds east and southeast and west respectively. The Delegated Officer has had regard for the sensitive residential receptors located approximately 150m east of the prescribed premises and has formed the view that the sensitive receptor is more likely to be impacted by dust emission from the premises activities during strong easterly wind conditions. Impacts may occur from a number of courses in addition to screening activities (e.g crushing, stockpiling, transfer of material etc.). The Delegated Officer has therefore conditioned that all dust generating activities associated with premises operations must be ceased during strong wind conditions in an easterly direction (the direction of the residential premises). The application controls have also been conditioned in the licence.
	Noise	Air / windborne pathway causing impacts to health and amenity	Residential premises located 150m east of the premises.	Refer to Section 3.1.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1 and 4	The Delegated Officer has considered the location of the sensitive receptors in relation to the premises and the noise validation assessment carried out by Wood and have concluded that during operation of the premises noise emissions are likely to comply with the <i>Environmental</i> <i>Protection (Noise) Regulations</i> 1997. No ongoing noise

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

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Risk events					Risk rating ¹	Annlinent		
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
								monitoring is required. The applicants' controls have been included on the licence to manage potential emissions of noise from the premises.
	Contaminated Stormwater with Sediment and hydrocarbons	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Surface water canal north east and south east from the northern top of premises boundary. Minor watercourse 480m north of northern boundary. Groundwater depth at 19m AHD.	Refer to Section 3.1	C = Minor L = Rare Medium Risk	Y	Condition 1	The Delegated Officer has considered the location of the sensitive receptors in relation to the premises and has included the applicants controls on the licence to manage potential emissions of contaminated stormwater from the premises.
Operation of Mobile Screening Plant (including conveyor) Vehicle movements	Hydrocarbon discharge / spill to land	Direct discharge to surface water and infiltration to groundwater.	Surface water canal north east and south east from the norther top of premises boundary. Minor watercourse 480m north of northern boundary. Groundwater depth at 19m AHD.	Refer to Section 3.1.1	C = Minor L = Rare Low Risk	Y	Condition 1	The applicant's controls have been conditioned within the licence to manage potential emissions of hydrocarbons.

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.

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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 25 January 2022	None received	N/A		
Local Government Authority advised of proposal on 25 January 2022	 The Shire of Serpentine Jarrahdale replied on 4 February 2022: Environmental issues: "The Shire sought to protect the vegetation complex within the Stage 3 extraction areas as a large portion of the vegetation complex was identified as having a good condition of 'good to very good' with portions also identified as 'degraded'. The associated condition in respect of this matter was one such matter that the applicant requested review by the SAT. As part of the SAT process, the applicant proposed a 20 metre extraction buffer from the 'good to very good' vegetation to ensure that it is protected and retained. The position was supporting by Council at its 26 February 2018 OCM. The Shire seeks to ensure the licence reflects this". "Conditions were also agreed through the SAT process to ensure fencing and the batter associated with the buffer is implemented prior to the extraction works occurring onsite. The Shire also seeks to ensure this is reflected in the licence". Planning Framework: "The main concern is in respect of condition 5 of the planning approval which states that: This approval is valid for a period of five years from the date of determination. The date of determination, that was not modified or redated through the SAT process, was 28 August 2017. 	The Delegated Officer will not make a final determination on the application until evidence has been provided to support that planning approval has been granted. The Delegated Officer notes that the applicant has since advised that there is a new 5 year planning approval (Ref: 29-50104-2) which was dated 11 May 2022 with a new expiry of 10 May 2027.		

	Thus, the approval will expire in a matter or months. It appears prudent to defer issuing of licence until such time that the applicant has made a new application and had that determined.	
Applicant was provided with draft documents on 15 July 2022	The Applicant responded on 10 August 2022 that they were happy with the Draft instrument and had no further comments.	N/A

5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a licence 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) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 3. DWER 2020, Guideline: Risk Assessments, Perth, Western Australia.
- 4. Wood 2022, Equipment Noise Measurement and Attended Monitoring, Hanson Hopeland Sand Quarry,

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY							
Application type							
Works approval							
	×	Relevant works approval number:	W6288/2019/1	None			
		Has the works approval been complied with?		Yes ⊠	No 🗆		
Licence		Has time limited operations under the works approval demonstrated acceptable operations?		Yes ⊠	No 🗆 N/A 🗆		
		Environmental Compliance Report submitted?		Yes ⊠	No 🗆		
		Date Report received: 27/4/2021					
Renewal		Current licence number:					
Amendment to works approval		Current works approval number:					
		Current licence number:					
Amendment to licence		Relevant works approval number:		N/A			
Registration		Current works approval number:		None			
Date application received		25/10/2021					
Applicant and Premises details	Applicant and Premises details						
Applicant name/s (full legal name/s)		Hanson Constructions Materials Pty Ltd ACN: 009 679 734					
Premises name		Hanson Hopeland					
Premises location		Lot 137 Plan/Diagram: 152967					
		Vol No: 1668 Folio No. 739					
		394 Hopeland Rd, Hopeland WA					
Local Government Authority		Shire of Serpentine Jarrahdale					
Application documents							
HPCM file reference number:		DWERD1519316					
application form):		Works approval and screening licence application report					
Scope of application/assessment							
Summary of proposed activities or changes to existing operations.		<i>Licence</i> Operation of a mobile screening Plant including a conveyor.					

Category number/s (activities that cause the premises to become prescribed premises) Table 1: Prescribed premises categories							
Prescribed premises category and description desi		posed pro	oduction or city				
Category 12: Screening etc. of Maximaterial Estimannu		imum cap es per an nated: 16 um	pacity: 250,000 num 0,000 tonnes per				
Legislative context and other approv	vals						
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 🗵	Referral decision No: Managed under Part V □ Assessed under Part IV □			
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?		Yes □	No 🖂	Ministerial statement No: EPA Report No:			
Has the proposal been referred and/or assessed under the EPBC Act?		Yes 🗆	No 🗵	Reference 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 ⊠	No 🗆 N/A 🗆	Approval: Expiry date: If N/A explain why?			
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?		Yes ⊠	No 🗆	CPS No: CPS 8036/1			
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 Not applicable			
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: GWL178117/1			

Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes 🗆 No 🗆	Name: Serpentine River System and Serpentine Groundwater AreaType: Proclaimed Surface Water Area and Groundwater AreaHas Regulatory Services (Water) been consulted?Yes □ No ⊠ N/A □ Regional office: Swan Avon
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: N/A Priority: P1 / P2 / P3 / N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? 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 ⊠	If Yes include details here.
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes 🗆 No 🛛	If Yes include details of which EPP(s) here.
Is the Premises subject to any EPP requirements?	Yes □ No ⊠	If Yes, include details here, e.g. Site is subject to SO ₂ requirements of Kwinana EPP.
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes □ No ⊠	If Yes include details here. Classification: N/A Date of classification: N/A