



Application for a works approval

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

Works approval number	W6631/2021/1
Applicant	Hanson Construction Materials Pty Ltd
ACN	009 679 734
File number	DWER2021/000697
Premises	Hanson Margaret River Concrete Batching Plant 10 Owen-Tucker Lane MARGARET RIVER WA 6285 Legal description – Lot 247 on Plan 218765
Date of report	19 April 2022
Status of report	Final

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Senior Environmental Officer, Industry Regulation

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

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 and operation of the premises. As a result of this assessment, works approval W6631/2021/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this 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 and overview of premises

Background

On 1 December 2021, Hanson Construction Materials Pty Ltd (the applicant) applied for a works approval under section 54 of the *Environmental Protection Act 1986* (EP Act) to install a new cement silo at its existing concrete batching plant in Margaret River. The premises is located at 10 Owen-Tucker Lane, Margaret River, which is situated within an existing industrial area.

The premises relates to prescribed premises category 77: concrete batching and cement products manufacturing, with an assessed production capacity of 80 tonnes per hour, under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6631/2021/1. 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 below and in works approval W6631/2021/1.

Proposed works

The proposed works involve installation of an additional cement and supplementary cementitious material (SCM) storage silo within the existing concrete batching plant operation. The key purpose of the silo is to enable the use of SCM (flyash or granulated blast furnace slag) as a cement replacement product in the production of ready mix concrete. SCMs are commonly used in concrete manufacturing and enable a reduction in the use of cement, which can alter concrete performance and reduce the net carbon footprint of the production of concrete.

The new silo will not change the production capacity or throughput at the premises.

Key aspects of the proposal include:

- installing a new cement storage silo (90 tonnes storage capacity), fitted with a venting and extraction dust collector;
- installing a new silo monitoring system; and
- connecting the new silo into the existing air systems.

A concrete batching plant has been registered at the site for more than 20 years (R1320/2001/1). Upon construction of the silo, it may commence operation under the existing registration and must comply with the *Environmental Protection (Concrete Batching and Cement Products Manufacturing) Regulations 1998* (Concrete Batching Regulations).

2.3 Other relevant approvals

Planning approvals

Planning approval was granted (planning approval number P221690) on 23 November 2021.

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

Emissions and controls

The key emissions and associated actual or likely pathway during construction and 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
Construction			
Dust	Construction of pad and installation of silo	Air / windborne pathway	Short term construction work (6 months) conducted between 7 am and 6 pm Water down roadways and stockpiles of waste as required.
Noise		Air / windborne pathway	Day time operation and separation distance
Operation			
Dust	Silo storage of cementitious material	Air / windborne pathway	<p>The new silo will include:</p> <ul style="list-style-type: none"> • a relief valve which is piped to a weigh hopper or outlet within 1 m of the ground to prevent overflowing; • a level indicator with an audible high level alarm which sounds if cement reaches 0.6 m below the inlet to the silo's air cleaning system; • a test circuit which indicates whether the level indicator and alarm are operating correctly; • a fabric filter dust collector (baghouse) designed to reduce dust emissions to less than 50 milligrams of particulate matter per cubic metre; • the baghouse is fitted with an

Emission	Sources	Potential pathways	Proposed controls
			<p>automatic reverse pulse air cleaning system which initiates cleaning at the end of each cleaning cycle;</p> <ul style="list-style-type: none"> • a pressure differential device to detect blockages and holes in the filter; and • ducting which discharges air from the cement silo air cleaning system to within 1 m of the ground. <p>The silo will be operated in accordance with the Concrete Batching Regulations.</p>
Contaminated water runoff	Contamination from spills of SCM.	Direct discharge to land and overland flow impacting ecosystem health	Bund beneath silo to capture spills of SCM. Potentially contaminated water is recycled through the production of concrete.

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 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 receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Residential dwellings Zoned Composite Industry in Shire of Augusta-Margaret River Local Planning Scheme No. 1	260 m northeast from boundary to boundary
Environmental receptors	Distance from prescribed activity
Margaret River	<3km north west

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 W6631/2021/1 that accompanies this report authorises construction. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Upon completion of the silo the works approval holder may operate it under the existing registration. A risk assessment for the operational phase has been included in this decision report.

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

Risk events					Risk rating ¹	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood			
Construction								
Construction of new silo and installation of associated infrastructure	Dust	Air / windborne pathway causing impacts to health and amenity	Residences 260 metres northeast	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 1 – infrastructure controls	N/A
	Noise			Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 1 – infrastructure controls	N/A
Operation								
Operation of silo	Dust	Air / windborne pathway causing impacts to health and amenity	Residences 260 metres northeast	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	Condition 1	Condition 1 of the works approval will impose infrastructure controls to ensure compliance with the <i>Concrete Batching Regulations</i> during ongoing operations .
	Contaminated stormwater	Direct discharge to land and overland flow impacting system ecosystem health	Land and Local Government Authority stormwater drains. Margaret River <3km away		C = Slight L = Unlikely Low Risk			

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 24 December 2021	None received	N/A
Applicant was provided with draft documents on 11 April 2022	Applicant replied on 12 April 2022 with no comment.	N/A

5. Decision

The delegated officer has determined the construction and operation of the additional silo at the batching plant will not significantly add to the risk of adverse impacts from emissions from the site. In making this decision the delegated officer has considered that:

- production at the site is determined by orders and will not increase as a result of the silo being installed; and
- the premise will continue to operate under the Concrete Batching Regulations.

6. 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) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY		
Application type		
Works approval	<input checked="" type="checkbox"/>	W6631/2021/1
Date application received	1 December 2021	
Applicant and Premises details		
Applicant name/s (full legal name/s)	Hanson Construction Materials Pty Ltd	
Premises name	Hanson Margaret River	
Premises location	Lot 247 on Plan 218765	
Local Government Authority	Shire of Augusta Margaret River	
Application documents		
HPCM file reference number:	DWERDT533285	
Key application documents (additional to application form):	Drawings of proposed silo	
Scope of application/assessment		
Summary of proposed activities or changes to existing operations.	<p>Works approval</p> <p>Installation of additional 90 tonne silo for cement and supplementary cementitious material storage silo. Installation will include:</p> <ul style="list-style-type: none"> •New silo top filter system •Modification to the load hopper •New footings for silo •New concrete bund and new cladding for load bay 	
Category number/s (activities that cause the premises to become prescribed premises)		
Table 1: Prescribed premises categories		
Prescribed premises category and description	production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 77: Concrete Batching and cement products manufacture	80 m ³ /hr production is on an as needed basis when orders come in.	NA new silo will not change production capacity
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 checked="" type="checkbox"/> General lease <input type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	Approval: Applicant has applied to the shire and approval is still under assessment.
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.
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 type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit No: Licence / permit not required.
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
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Environmental Protection (Concrete batching and cement products manufacturing) Regulations 1998</i>
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
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"/>	