



Application for Works Approval

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

Works Approval Number	W6487/2020/1
Applicant	Holcim (Australia) Pty Ltd
ACN	099 732 297
File Number	DER2020/000660
Premises	Holcim Merredin Legal description - Lot 26740 on Plan 158701 Chandler- Merredin Road MERREDIN WA 6415 As defined by the Premises maps attached to the issued works approval
Date of Report	26 March 2021
Proposed Decision	Works approval granted

Amine Fisher

A/SENIOR ENVIRONMENTAL OFFICER, PROCESS INDUSTRIES

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

Table of Contents

1. Decision summary	1
2. Scope of assessment	1
2.1 Regulatory framework	1
2.2 Application summary and overview of Premises	1
3. Planning approvals	1
4. Risk assessment	1
4.1 Source-pathways and receptors	2
4.1.1 Emissions and controls	2
4.1.2 Receptors	4
4.2 Risk ratings	5
5. Decision	9
6. Consultation	9
7. Conclusion	9
References	9
Appendix 2: Application validation summary	11

Table 1: Proposed applicant controls	2
Table 2: Sensitive human and environmental receptors and distance from prescribed activity	4
Table 3: Risk assessment of potential emissions and discharges from the Premises during construction and time limited operation	6
Table 4: Consultation	9

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 W6487/2020/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Decision 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

On 14 December 2020, Holcim (Australia) Pty Ltd (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 establishing a mobile concrete batching plant at Lot 26740 on Plan 158701 Chandler- Merredin Road (the Premises) approximately 4 km north-east of the town of Merredin.

The Premises relates to the category 77 and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in Works Approval W6487/2020/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guidance Statement: Risk Assessments* (DER 2017) are outlined in Works Approval W6486/2020/1

The mobile concrete batching plant will be located at the applicant's existing registered concrete batching premises (R226/1970/1). The premises is located within a larger existing quarry site operated by the applicant. The mobile concrete batching plant will be used for the purpose of supplying concrete to a specific project therefore the applicant proposes the plant will be mobilised to the premises, operated, decommissioned and removed within a 14 day period. The mobile plant is proposed to undertake a single 12 hour period (6pm -6 am) of concrete batching to produce 560 m³ (1,232 tonnes) of concrete.

The mobile concrete batching plant will comprise of a cement silo, 2 cement weigh hoppers, sand and aggregate feed hopper and conveyors. The plant will be established on a gravel bund lined with high density polyethylene (HDPE) and graded toward an HDPE lined wedge pit. Other temporary infrastructure which will be established includes a loading bay, temporary bund/IBCs, a slump stand, generators, chiller and chilled water tanks, batch room and admixture storage.

Washout water will be directed to initially from the agitator truck to IBCs and transferred to existing fixed plant water management facilities.

3. Planning approvals

The applicant was advised by the Shire of Merredin that a development approval for the mobile plant was not required as the operation will take place over less than 48 hours and is exempt.

4. 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 *Guidance Statement: Risk Assessments* (DER 2017).

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.

4.1 Source-pathways and receptors

4.1.1 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 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	Placement and removal of mobile concrete batching plant and associated equipment Vehicle movements	Air/windborne pathway	In accordance with section 4 of the <i>Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1999</i> (Concrete Batching Regulations): <ul style="list-style-type: none"> – equipment placement will be monitored and loose materials will be swept, hosed down or cleared to minimise dust emissions; and – where the existing facility is not either paved or sealed, it will be otherwise treated to minimise dust releases.
Noise			Noise during construction will be managed using the following: <ul style="list-style-type: none"> - silencers on vehicles; - noise attenuation on construction equipment; and - mufflers on mobile and stationary equipment.
Operation			
Dust	Operation of mobile concrete batching plant (conveyors, transfer points, hoppers) Storage of raw materials (existing bays and stockpiles) Operation of mobile equipment and vehicles	Air/windborne pathway	Control of dust from trafficable areas will be in accordance with section 4 of the Concrete Batching Regulations with: <ul style="list-style-type: none"> – monitoring of activities and loose materials/spillage being swept, hosed down or cleared to minimise dust emissions; and – where the existing facility is not either paved or sealed, it will be otherwise treated to minimise dust releases. <p>Material handling will be undertaken accordance with section 9 of the Concrete Batching Regulations with all hoppers, conveyors, chutes, bucket elevators or transfer points, or areas used to load concrete agitator trucks either enclosed or fitted with dust prevention measures to prevent escape of visible dust. All split material during concrete batching will be immediately</p>

Emission	Sources	Potential pathways	Proposed controls
			<p>cleaned up in accordance with section 3.</p> <p>Storage of raw materials will be in accordance with section 5 of the Concrete Batching Regulations. Existing storage bays on the premises, which are designed to minimise dust emissions, will be used or if additional capacity is required raw materials will be stored in stockpiles which are covered or kept damp with sprinklers to minimise dust emissions.</p> <p>Cement storage will comply with sections 6 to 8 of the Concrete Batching Regulations with the mobile plant storage silo having an air cleaning system, a level indicator with an audible alarm and a relief valve which all meet the requirements of the Regulations.</p>
Noise	<p>Operation of mobile concrete batching plant, generators and chiller</p> <p>Operation of mobile equipment and vehicles</p>		<p>Noise during operation will be managed using the following:</p> <ul style="list-style-type: none"> - silencers on vehicles; - mufflers on mobile and stationary equipment; and - sensitive receptors will be advised of the intended temporary operating hours. <p>Operation will occur for a limited timeframe of 12 hours.</p>
Light	<p>Operation of mobile concrete batching plant</p> <p>Operation of mobile equipment</p>	-	<p>Operation will occur for a limited timeframe of 12 hours.</p> <p>Sensitive receptors will be advised of the intended temporary operating hours</p>
Contaminated wastewater or stormwater	<p>Returning trucks</p> <p>IBCs and existing washout sumps</p> <p>Loading bay</p>	Direct discharge to land from containment infrastructure or runoff from the loading bay	<p>Due to the short duration of operation the volume of wastewater expected to be produced will be small (estimated 13,500 litres)</p> <p>In accordance with the Concrete Batching Regulations section 11 runoff is contained on site, directed to and captured in an existing slurry pit or temporary bunding.</p> <p>Washout water will be directed to IBC's within the loading pad area and when full will be transferred to the existing water management infrastructure located within the premises.</p>
Washout solids	IBCs and existing washout sumps		<p>Due to the short duration of operation the volume of solids expected to be produced will be small (estimated 15.8 tonnes).</p> <p>Washout solids will be contained in the existing slurry pit on the premises.</p> <p>In accordance with the Concrete Batching Regulations section 13 washout solids are removed from the washout pits weekly by contractors and disposed of at an appropriately licensed facility.</p>

4.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the applicant'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 (*Guidance Statement: Environmental Siting* (DER 2016)).

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

Human receptors	Distance from prescribed activity
Rural light industrial	585m south west of premises boundary
Rural residential	1225m south west of premises boundary 1250m south west of premises boundary 1284m south west of premises boundary 1350m south west of premises boundary
Environmental receptors	Distance from prescribed activity
Priority 4 fauna	More than 1.5km north east of the premises boundary
Priority 2 flora	At least 2km north north east of the premises boundary
Minor non-perennial watercourse	350m south (down gradient) of the proposed plant location

4.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for each identified emission source and take into account potential source-pathway and receptor linkages as identified in Section 4.1. 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 4.1), 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 W6487/2020/1 that accompanies this Decision Report authorises installation of the mobile concrete batch plant and its removal from the premises. As the premises has an existing Registration R226/1970/1, following completion of construction/installation, no further authorisation is required for operation under Part V of the EP Act. Operation of the plant will however be required to meet the requirements of the Concrete Batching Regulations. 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 and time limited operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Reasoning and justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction, decommissioning and removal								
Placement, decommissioning, and removal of a mobile concrete batching plant and associated equipment including vehicle movements (reversing beepers).	Dust	Air/windborne pathway causing impacts to health and amenity	Rural light industrial (585m south west of premises boundary)	Refer to Section 4.1.1	C = low level impact to amenity Minor L = likely to occur only in exceptional circumstances Rare Low Risk	Y	NA	There have not been any complaints relating to noise or dust emissions associated with operation of the existing concrete batching plant received by DWER within the last 5 years. The premises is subject to the Concrete Batching Regulations which include a requirement to treat areas which aren't paved or sealed with water or surfactants to minimise dust. The requirements of the <i>Environmental Protection (Noise) Regulations 1997</i> (Noise Regulations) also apply. The delegated officer does not expect noise or dust impacts to occur during the establishment or demobilization of the mobile plant from the premises taking into consideration the duration, scale and scope of the activities, the distance to the nearest receptor, the applicant's proposed noise controls for mobile equipment and the complaint history relating to the premises.
	Noise		Rural residential (1225m south west of premises boundary, 1250m south west of premises boundary, 1284m south west of premises boundary, 1350m south west of premises boundary)	Refer to Section 4.1.1	C = low level impact to amenity Minor L = will probably not occur in most circumstances Rare Low Risk	Y		
Operation (short term)								
Operation of a mobile concrete batching plant: - conveyors - transfer of aggregate and sand from stockpiles to hoppers - storage of raw materials	Increase in dust	Air/windborne pathway causing impacts to health and amenity	Rural light industrial (585m south west of premises boundary) Rural residential (1225m south west of premises boundary, 1250m south west of	Refer to Section 4.1.1	C = low level impact to amenity Minor L = will probably not occur in most circumstances Unlikely Medium	Y	Condition 1 to 3 <u>Condition 4 and 5</u>	DWER has not received any complaints relating to dust emissions associated with operation of the existing concrete batching plant on the premises within the last 5 years. The applicant has proposed that the design and operation of the mobile plant will comply with the requirements of the Concrete Batching Regulations which include requirements relating to

Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Reasoning and justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
			premises boundary, 1284m south west of premises boundary, 1350m south west of premises boundary)					<p>minimising dust emissions.</p> <p>The delegated officer does not expect dust impacts to occur associated with operation of the mobile plant taking into consideration the short duration and timing of operation, small production volume, the distance to the nearest receptor, the complaint history relating to the premises and the requirement to operate in accordance with the Concrete Batching Regulations.</p> <p>To ensure the mobile plant is only used for the proposed short-term activity conditions are included in the works approval requiring removal of the infrastructure within a 30 day period of it being established and the assessed production capacity has been set based on the applicant's estimated production for a single 12 hour period of operation.</p>
	Increase in noise			Refer to Section 4.1.1	<p>C = mid level impact to amenity</p> <p>Moderate</p> <p>L = could occur at some time</p> <p>Possible</p> <p>Medium risk</p>	Y	<u>Condition 4 and 5</u>	<p>Taking into consideration the duration and timing of operation, the distance to the nearest receptor, the applicant's proposed noise controls and the complaint history relating to the premises the delegated officer considers there to be a medium risk of amenity impact occurring at receptors associated with noise emissions during nighttime operation of the mobile plant.</p> <p>The delegated officer considers the risk is adequately addressed through the provisions of the Noise Regulations which will apply to the operation of the mobile concrete batching plant.</p> <p>To ensure the mobile plant is only used for the proposed short-term activity conditions are included in the works approval requiring removal of the infrastructure within a 30 day period of</p>

Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Reasoning and justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								it being established.
	Increase in light			Refer to Section 4.1.1	C = minimal impact to amenity Slight L = will probably not occur in most circumstances Unlikely Low Risk	Y	NA	The delegated officer considers due to the short duration of operation and the distance to the nearest receptor light from the mobile plant operation is unlikely to impact the amenity of surrounding receptors.
	Increase in washout wastewater and stormwater contaminated with cement and other substances	Direct discharge to land from activities or inadequate containment (IBCs) causing contamination	Soils within the premises	Refer to Section 4.1.1	C = minimal on or off site impacts Slight L = will probably not occur in most circumstances Unlikely Low Risk	Y	Condition 1 to 3 <u>Condition 4 and 5</u>	The delegated officer considers loss of containment events are likely to be of low volume and short duration given the temporary nature and scale of the operation. The applicant has proposed that the design and operation of the mobile plant will comply with the requirements of the Concrete Batching Regulations, which include requirements relating to control of wastewater, management of slurry pits and disposal of waste, to minimise the likelihood of loss of containment occurring. To ensure the mobile plant is only used for the proposed short-term activity conditions are included in the works approval requiring removal of the infrastructure within a 30 day period of it being established.
	Increase in concrete washout solids			Refer to Section 4.1.1	C = minimal on or off site impacts Slight L = will probably not occur in most circumstances Unlikely Low Risk	Y		

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

5. Decision

The delegated officer determined the applicant's proposal to establish a mobile concrete batching plant temporarily on the premises, to produce concrete over a single 12 hour night time period, will not alter the risk profile of the existing concrete batching activity occurring on the premises. The temporary nature of the activity, and small proposed production volume, were key considerations in making this determination. The delegated officer has therefore determined to approve the proposal and has included an assessed production capacity based on the applicant's proposed volume of concrete which will be produced, and a requirement to remove the infrastructure from the premises within 30 days of being established in the works approval, in addition to design and installation requirements based on the applicant's proposed controls which are aligned to the requirements of the Concrete Batching Regulations. The works approval has also been granted for a reduced period of six months given the short duration and proposed timing of the works.

The premises is already registered (R226/1970/1) under section 5B of the EP Regulations for category 77 concrete batching and cement productions manufacturing, which is regulated by the Concrete Batching Regulations, therefore no further approval will be required to operate the premises following construction and submission of compliance documentation in accordance with the requirements specified in the works approval. The delegated officer has reviewed the Applicant's proposed controls and consider they are appropriate to minimise emissions and that the Concrete Batching Regulations are likely to be complied with, provided the controls are implemented.

6. 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 (6/01/2021- 13/01/2021)	None	N/A
Local Government Authority advised of proposal (6/01/21)	None	N/A
Applicant was provided with draft documents on 25 January 2021	The applicant replied on 22 February 2021 with requested additional information and subsequently provided and updated plan for the premises on 24 March 2021.	Additional information and plan considered and included in the final instrument.

7. 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) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.

2. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Holcim 2020, *Merredin Concrete Batching Plant Works Approval Application*, Perth, Western Australia.

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	14/12/20			
Applicant and Premises details				
Applicant name/s (full legal name/s)	Holcim (Australia) Pty Ltd			
Premises name	Holcim Merredin			
Premises location	Lot 26740 Chandler-Merredin Road Merredin			
Local Government Authority	Shire of Merredin			
Application documents				
HPCM file reference number:	DWERDT391156			
Key application documents (additional to application form):	Siting and location plan ASIC extract Project costs Detailed water tank site layout Lease Supporting document			
Scope of application/assessment				
Summary of proposed activities or changes to existing operations.	Mobilisation of a mobile concrete batching plant and associated equipment for short term supplementary concrete supply.			

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 77: concrete batching or cement product manufacturing: premises on which cement products or concrete are manufactured for use at places or premises other than those premises	6528 tonnes	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 type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	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 <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.

<p>Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: N/A Type: N/A Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office: N/A</p>
<p>Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: N/A Priority: P1 / P2 / P3 / N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p>
<p>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>)</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p><i>Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998</i></p>
<p>Is the Premises within an Environmental Protection Policy (EPP) Area?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Classification: N/A Date of classification: N/A</p>