



Application for Works Approval

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

Works Approval Number W6903/2024/1

Applicant Holcim (Australia) Pty Ltd

ACN 099 732 297

File number DER2024/000083

Premises Holcim Boulder Concrete
Legal description
Lot 580 on Deposited Plan 68637
Certificate of Title Volume 3160 Folio 816

Date of report 19 April 2024

Decision Works approval granted

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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 and operation of the premises. As a result of this assessment, works approval W6903/2024/1 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 22 February 2024, 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 the establishment of a mobile concrete batching plant at Lot 580 on Deposited Plan 68637, Kambalda Road, Boulder (the premises). The premises is approximately 6 km south-east of Kalgoorlie Boulder.

The premises relates to category 77 concrete batching and cement products manufacturing with a proposed production capacity of 20,000 tonnes per year under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6903/2024/1. 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 works approval W6903/2024/1.

The mobile concrete batching plant will be located at the applicant's existing registered Boulder Concrete Batching Plant premises (R1257/1996/1) which is located on Lot 580 on Deposited Plan 68637 and authorises operation of an existing fixed concrete batching plant by the applicant. The applicant proposes to use the mobile concrete batching plant for the purpose of supplying a maximum of 20,000 m³ of concrete to the KCGM Fimiston Expansion Project for 12 months. The applicant intends to commence mobilisation from 1 April 2024 and decommission completely by 31 March 2025. The Mobile CBP (Concrete Batching Plant) will principally be used for security of supply as a backup in event of a breakdown of the fixed plant.

The mobile concrete batching plant will comprise of a Portabatch Mobile Batch Plant, two portable generators, a Concrete Loadout Apron and Wedge Pit. The existing storage infrastructure on the premises will be utilised for storage of materials such as aggregate and sand. Other infrastructure on the premises includes water tanks, water chillers, aggregate/ cement hoppers, slump stands, and silos.

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 / 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/ Operation			
Dust	<p>Construction and installation of new mobile plant and equipment.</p> <p>Vehicle movements</p> <p>Delivery of raw materials, batching of concrete, slump stands.</p>	Air / windborne pathway	<ul style="list-style-type: none"> • Removal of loose materials by being swept, hosed or otherwise cleared to prevent material adhering to vehicles and minimise dust releases • Washing of vehicles carrying concrete • Material storage infrastructure designed to minimise the influence of wind and generation of windborne dust. Material stored will not exceed the height of the infrastructure (1m). • Where material is not stored within bays or storage bins, stockpiles will be either covered or kept damp through watering to minimise dust • Monitoring of the unloading of materials so that in the event of dust escaping, unloading can be ceased and measures such as the watering of materials or postponing until conditions improve can occur. • All cement stored in silos fitted with an air cleaning system and a level indicator or relief valve. • Mobile horizontal silo fitted with air cleaning system and regularly inspected and tested weekly • Speed limits enforced on site • Agitator loading points are enclosed and fitted with wind shields and water sprays
Noise	<p>Construction and installation of new mobile plant and equipment.</p> <p>Vehicle movements</p> <p>Delivery of raw materials, batching of</p>	Air / windborne pathway	<ul style="list-style-type: none"> • Low noise reversing beepers for vehicles and other equipment • Mobile and stationary equipment with effective exhaust mufflers • Investigate any noise related community compliant received

Emission	Sources	Potential pathways	Proposed controls
	concrete, slump stands.		
Wastewater	Overtopping of wedge pits during heavy rainfall Direct discharge to land	Discharge to surrounding lands, stormwater, and groundwater	<ul style="list-style-type: none"> All wastewater from the temporary Mobile CBP will be directed into the wedge pit for treatment Wedge pit managed to maintain a minimum of 25 cm below the top of wedge pit walls 100% of the water collected in the wedge pit is recycled and can be increased/decreased as required All concrete hardstands installed with a bunded perimeter and graded to report to wedge pits

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 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 Premises	~ 1.5 km north of prescribed premises
Industrial Area	~ 1 km north of prescribed premises
Bass Management Pty Ltd	~ 145 m south of premises
Boulder Cemetery	Directly to the east of the premises
Licensed Premises (Total Waste Management)	~ 420 m to the south east
Commercial / Industrial Site	~ 750 m to the south west
Environmental receptors	Distance from prescribed activity
Specially Protected Fauna	Two locations within a 1 km buffer of the premises
Surface water line (minor)	700 m south and 1 km east of prescribed premises
Goldfields Groundwater Area	Encompasses the premises

Native Title – Marlinyu Ghoorlie	Encompasses the premises
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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 considers 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 W6903/2024/1 that accompanies this decision report authorises installation of the mobile concrete batch plant. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 20215)

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 and installation of new mobile plant and equipment. Vehicle movements	Dust	Air / windborne pathway causing impacts to health and amenity	Residences ~1.5 km north and industrial premises ~ 1 km north	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1, 2, 3: infrastructure requirements	N/A
	Noise		Cemetery directly east of premises Multiple commercial / industrial premises within 145 – 750 m buffer of prescribed premises	Refer to Section 3.1	C = Minor L = Possible Medium Risk	Y	Condition 1, 2, 3: infrastructure requirements	The Delegated Officer considers applicants controls satisfactory. The Works Approval Holder is required to comply with the <i>Environmental Protection (Noise) Regulations 1997</i> .
	Contaminated stormwater discharge from operational areas following heavy rainfall event	Direct discharge to land	Soil Surface water line (minor) ~ 700 m south of prescribed premises Goldfields Groundwater Area encompasses the premises	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1, 2, 3: infrastructure requirements	N/A
Operation of mobile temporary plant								
Delivery of raw materials, batching of concrete, slump stands. Vehicle movements	Dust	Air / windborne pathway causing impacts to health and amenity	Residences ~1.5 km north and industrial premises ~ 1 km north Cemetery directly east of premises	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1, 2, 3: infrastructure requirements	N/A
	Noise		Multiple commercial / industrial premises within 145 – 750 m	Refer to Section 3.1	C = Moderate L = Possible	Y	Condition 1, 2, 3: infrastructure requirements	The Delegated Officer considers applicants controls satisfactory.

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				
			buffer of prescribed premises		Medium Risk			The Works Approval Holder is required to comply with the <i>Environmental Protection (Noise) Regulations 1997</i> .
	Wastewater	Direct discharge to stormwater and land	Stormwater infrastructure Surface water line (minor) ~ 700 m south and 1 km east of prescribed premises Goldfields Groundwater Area encompasses the premises	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1, 2, 3: infrastructure requirements	N/A
	Contaminated stormwater discharge following heavy rainfall event	Direct discharge to land	Soil and groundwater	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 1, 2, 3: infrastructure requirements	N/A
Storage and handling of waste and hydrocarbons	Leaks and spills	Direct discharge to stormwater and land	Stormwater infrastructure Surface water line (minor) ~ 700 m south and 1 km east of prescribed premises Goldfields Groundwater Area encompasses the premises	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1, 2, 3: infrastructure requirements	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 18 March 2024	No comments received	N/A
Local Government Authority advised of proposal on 19 March 2024	No comments received	N/A
Applicant was provided with draft documents on 11 April 2024	The applicant provided the following comment on 15 April 2024: Note one typographical error in the design and construction requirements in the works approval.	Error fixed accordingly in Table 1 of the works approval.

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. 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.