Government of Western Australia
Department of Water and Environmental Regulation

Decision Report

Application for Works Approval

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

Works Approval Number	W2882/2025/1
Applicant	MB Solutions Australia Pty Ltd Trading as Master Builders Solutions
ACN	634 934 419
File number	APP-0027020
Premises	Master Builders Solutions Unit 4, 980 Abernethy Road, High Wycombe Kalamunda Legal description Part Lot 801 on Deposited Plan 423175 Certificate of Title Volume 4012 Folio 243 As defined by the coordinates in Schedule 1 of the works approval
Date of report	12 August 2025
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 W2882/2025/1 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

On 23 December 2025, MB Solutions 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 for a works approval to install and construct infrastructure relating to the establishment of a chemical mixing plant within an existing building at unit 4, 980 Abernethy Road, High Wycombe (the premises). The premises is located in the City of Kalamunda on land zoned as 'General Industry'. The premises is one of five units within a larger shed, as shown in Schedule 1 of the works approval. The premises is located approximately 500 m southwest of the residential area of High Wycombe.

Initially the applicant applied for a works approval for a Category 33: Chemical blending or mixing which is defined as a premises on which chemicals or chemical products are mixed, blended or packaged in a manner that causes or is likely to cause a discharge of waste into the environment. The applicant conducted redesigns of the premises to improve the efficiency of scrubbers and exhaust stacks and eliminate emission to the environment. As such the applicant determined that the activities were better defined by Category 75: Chemical blending or mixing not causing discharge: premises on which chemicals or chemical products are mixed, blended or packaged in a manner that does not cause or is not likely to cause a discharge of waste into the environment. The applicant notified DWER in writing of the above-mentioned change in category and provided updated design plans.

2.3 Overview of premises

The premises relates to the category and assessed production / design capacity under Schedule 1, Part 2 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined above and in works approval W2882/2025/1. 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 W2882/2025/1.

The facility comprises a number of bulk liquid storage tanks, mixing vessels and storage tanks. The entire facility is located within a shed that has a concrete floor. Exterior loading and unloading areas are roofed and have a bunded concrete floor that drains to a containment sump.

There are no discharges from the process with all emissions captured by a wet scrubber that discharges the treated emissions from the process to within the shed.

The facility is designed to produce approximately 16,000 tonnes of product a year.

2.3.1 Proposed mixing activities

The premises activities will involve the manufacturing of cement additives and other related building products for the construction industry. Products are manufactured from raw materials in large mixing tanks which are then transferred to storage tanks before being decanted to smaller product containers.

The plant will be located within an enclosed industrial shed and consists of two sections, the reactor area and the tank farm.

The reactor area will consist of:

- Three large (reactor) tanks with a total volume of 60 000 L; and
- Three smaller (formic acid, DEA and caustic) raw material holding tanks with a total volume of 15 000 L.

Most raw materials will be delivered to either the intermediate storage area or the warehouse where bulk containers (IBC) or palletised bags are stored in a designated storage area within the warehouse. Some liquid raw materials will be delivered by tanker trucks to be stored in bulk storage tanks in the production area.

Liquid raw materials from the bulk tanks will be metered into the mixing tanks via pipework and a pumping system. Liquid raw materials from IBCs or small holding tanks will be metered to the mixing vessels directly from the IBC. Powdered raw materials are added into the mixing vessels through addition points at the top of the vessels.

2.3.2 Product and material storage and dispatch

Blended products will be transferred from the reactor area to the tank farm via a metred pipework and pumping system where they will undergo final processes such as heating, cooling and maturation.

The tank farm will consist of 12 tanks with a combined volume of 298 000 L including:

- Two 26,000 L process water tanks
- One 20,000 L cooling tank
- One 20,000 L heating tank
- One 26,000 L calcium nitrate tank
- Two 26,000 L PCE WD-500 (Powerflow) tanks
- Two 20,000 L PCE G300 tanks
- One 26,000 L SA178 tank
- One 31,000 L SA160 tank
- One 31,000 L SA167 tank

Final products will be pumped from the bulk storage tanks to packaged containers including 1000 L IBCs, 205 L and 20 L drums.

Finished products will be stored in the building until they are loaded to trucks within the loading area. The loading area is bunded concrete hardstand cover by a canopy located to the rear of the site. The application states that products will be stored and dispatched in accordance with AS 1940.

2.3.3 Storage and handling of dangerous goods

Activities at the facility will involve the mixing of concrete additives and raw materials classified as Class 8 (corrosive) and Class 9 (UN 3082 – environmentally hazardous liquids). As such, the infrastructure will be subject to the *Dangerous Goods Safety Act 2004*, the *Dangerous Goods Safety (Storage and Handling of non-explosives) Regulations 2007 and the Environmental Protection (Unauthorized Discharges) Regulations 2004*. The applicant holds a dangerous good licence (dangerous goods licence number DGS023248) issued by the Department of Local Government, Industry Regulation and Safety (LGIRS), to store, handle, manage and use dangerous goods.

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			
Noise	Construction of bunding within the existing building and the exterior hardstand area. Construction of all chemical mixing plant including installation of tanks, equipment and Vehicle movement.	Air / windborne pathway	Construction works are largely related to installation of equipment in the existing building and on preexisting hardstand and no excessive noise generation is expected. Process tanks and chemical mixing plant will be constructed off site and installed in the existing building.
Operation			
Dust	Operation of chemical mixing plant including pumps and vehicle movements	Air windborne pathway	Plant will be an enclosed system. Powdered raw materials charged to the mixing vessels through addition points in the tops of the vessels via a sleeve. Mixing vessels are equipped with wet scrubbing system which returns dust into the enclosed

Emission	Sources	Potential pathways	Proposed controls
			system. Emissions from scrubber stacks will emit inside the warehouse.
Noise			The warehouse is located within an area defined as industrial and utility premises. Noise monitoring at a similar MBS site indicates that expected noise will be below limits assigned under the *Environmental Protection (Noise) Regulations 1997* (noise regulations). Activities will be largely in an enclosed shed with the exception of truck movements. The applicant proposed biennial noise monitoring in line with their Noise Management Plan. The plant will operate 6am to 4pm Monday to Friday and occasionally for up to 6 hours on Saturdays.
Chemical spills	Storage of admixture products and warehouse storage of raw materials and admixture products (including up to 20kL of class 8 chemicals)	Overland runoff to soil and ground water. Runoff to stormwater drain.	The raw materials and finished products will be stored within an enclosed building. The warehouse floor is concrete with concrete curb bunding around the internal walls and at doors to offices from the warehouse/production area. The warehouse has a bunded concrete hardstand which has three sumps that drain to a central sump at the loading dock that is equipped with a pump and hose, allowing for the transfer of spill material in the sump to IBCs for reuse in the mixing plant. All dangerous good liquid waste that cannot be recycled back through the plant will be disposed of via a licensed contractor. Concrete, canopy covered, hardstand bunded to the premises boundary and to the warehouse wall. The mixing plant will be located within enclosed building with walls sealed at the floor and roll-over bunding to the entrance doors. The mixing plant and pipelines will be within a secondary, 35 kL bunded area. Products will be stored and dispatched in accordance with AS 1940:2017 and AS 3780:2023. Spill kits will be available around the site to contain and/or recover any minor spills. Spills will be managed in accordance with MBS's Spill Containment and Control Standard Operating Procedure.
	Loading and unloading of raw materials and finished products		
	Commissioning and time limited operation of chemical mixing plant – tank failure, pipeline leaks transfer		

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 receptors and distance from prescribed activity

Human receptors	**Distance from prescribed activity**
Closest residential receptor	480 m northeast of the premises boundary
Commercial businesses	Two adjacent to the premises within the same building.
Environmental receptors	**Distance from prescribed activity**
No sensitive environmental receptors occur within 300 m of the premises.	N/A

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 W2882/2025/1 that accompanies this decision 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).

A Registration is required under Section 5B of the Environmental Protection Regulations 1997 (EP Regulations) for the ongoing operation of the premises i.e. Chemical mixing, as Category 75 is listed under Part 2 of Schedule 1 of the EP Regulations.

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

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								
Installation of mixing plant including installation of tanks, bunding and equipment and vehicle movement	Noise	Air / windborne pathway causing impacts to health and amenity	Residences 480m from boundary Two adjacent industrial premises	Refer to Section 3.1 Refer to Section 3.1	C = Slight L = Rare **Low Risk**	Y	N/A	The delegated officer considers that the risk of noise emissions from construction activities will be low and does not warrant specific regulatory controls. General provisions of the EP Act, apply relating to pollution and public health and environmental harm and the *Environmental Protection (noise) Regulations 1997* will apply.
Operation								
Chemical mixing plant emission to air via stacks discharging within the enclosed shed.	Dust	Air / windborne pathway causing impacts to health and amenity	Residences from 480 m from premises boundary	Refer to Section 3.1	C = Minor L = Rare **Low Risk**	Y	Condition 1 Condition 6	Consideration has been given to the proximity of sensitive receptors and the nature of activities undertaken at the premises. The applicant provided an Environmental Air Quality Monitoring Report from its chemical mixing plant in South Australia. The air quality monitoring assessed levels of general dust and soluble aluminium salts, as aluminium sulphate is the primary dust source expected from the activities. Results for dust monitoring for the South Australia site indicated low levels of dust, with average results for the selected criteria being less than half the ambient air quality reference values for all parameters. Considering the activities at both sites relate to mixing of chemical products, the use of a wet scrubber in a closed system, the monitoring data was considered suitable to inform the risk from dust emissions. The delegated officer considers the applicants design controls to discharge the treated air within the shed to be sufficient to address the risk posed by dust emissions

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**				
								associated with the operation of the plant and these controls have been included as conditions on the works approval.
Chemical mixing plant operation and vehicle movement.	Noise	Air / windborne pathway causing impacts to amenity	Residences from 480m from the boundary of the premises	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	N/A	The delegated officer considers that the risk of noise emissions from operations impacting sensitive receptors is low, given that the work is mostly undertaken indoors. The applicant provided an Environmental Noise Monitoring Report from its similar chemical mixing plant in South Australia that indicates expected noise levels will meet the criteria of the *Environmental Protection (noise) Regulations 1997*. General provisions of the EP Act apply relating to causing pollution and environmental harm and the *Environmental Protection (noise) Regulations 1997* will apply.
Chemical mixing plant operation Loading and unloading of raw materials and finished products	Liquid chemical discharge from leaks spills, pipe ruptures, containment failure	Overland runoff and direct infiltration causing groundwater and/or stormwater contamination	Soil and groundwater contamination	Refer to Section 3.1	C = Minor L = Rare **Low Risk**	N	**Condition 1** Condition 6	Consideration has been given to the proximity of sensitive receptors and the nature of activities undertaken at the premises. Considering the multiple levels of spill containment and suitability of the site for a chemical mixing facility, the likelihood of contamination of soil and ground water has been determined to be rare. An additional infrastructure requirement has been added to the works approval to ensure that the main **containment sump is sealed to contain spills.** The applicant's infrastructure and spill containment controls have been included as conditions on the works approval.

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 22 May 2025	None received	N/A
Local Government Authority advised of proposal on 27 May 2025	None received	N/A
Other stakeholders advised of proposal on 27 May 2025	None received	N/A
Applicant was provided with draft documents on 14 July 2025 and responded on 11 August 2025	Comments to confirm details are provided in appendix 1.	N/A

5. Decision

Based on the assessment in this report, the delegated officer has determined the applicant's proposal to construct the chemical blending and mixing plant is not anticipated to pose an unacceptable risk of impacts to the environment or public health. The Applicant's proposed controls were found to be reasonable and appropriate to manage the assessed risk of potential emissions and discharges.

6. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a works approval will be granted for a period of three years and authorises the construction of the chemical plant, subject to conditions commensurate with the applicant's proposed controls and conditions necessary for compliance administration and reporting requirements.

References

1. Abarta EHS Management (2024) *Environmental Protection Act – Part V Works Approval Application: Master Builders Solutions Pty Limited*, Perth Western Australia.
2. Abarta EHS Management (2024) *Environmental Protection Act – Part V Works Approval Application – Facility Description: Master Builders Solutions Pty Limited*, Perth Western Australia.
3. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
5. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
6. WSP (2025) Occupational and Environmental Dust Assessment: Master Builders Solutions, Adelaide, South Australia.

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

Condition	Summary of applicant's comment	Department's response
N/A	Applicant confirmed business address	N/A
1	Applicant confirmed yard and warehouse have combined capacity of 500 kL, hard stand bunded area 450 kL	N/A
1	Applicant confirmed, sumps do not drain to the stormwater system	N/A
1	Applicant confirmed combined volume of the tanks is 298 000 L	N/A
N/A	Applicant confirmed DG License number is : DGS023248	N/A
N/A	Applicant advised general working hours are 6am to 4pm Monday to Friday and occasionally up to 6 hours on Saturdays	N/A