



Application for Works Approval

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

Works Approval Number W6846/2023/1

Applicant Bradken Resources Pty Ltd

ACN 098 300 988

File number DER2023/000639

Premises Bradken Bassendean

170 Railway Parade
BASSENDEAN WA 6054

Legal description -
Lot 4 on Diagram 16814
Certificate of Title Volume 193 Folio 401

Date of report 22 November 2023

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 W6846/2023/1 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 premises overview

On 29 September 2023, Bradken Resources 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 to establish a new metal coating booth at 170 Railway Parade, Bassendean within their existing metal coating premises. The premises is registered under section 5B of the EP Regulations for category 81 as Registration R2496/2019/1 with an assessed design capacity of 32,000 L per annum.

The applicants Bassendean facility processes a wide range of steel manufactured products primarily for the resources sector. The applicant has operated a steel manufacturing business at the premises for several decades and was granted approval in 2019 to construct a paint booth within the surface treatment shed under works approval W6185/2018/1. The applicant was granted further approval in 2021 to construct a ceramics paint booth within an existing shed for coating the metal backs of ceramic tiles and plates under works approval W6456/2020/1.

This application is for the construction of a new paint booth to facilitate an improved workflow and a moderate increase in capacity. The proposed paint booth is made from insulated panels, measuring 10 meters long, 8 meters wide and 5 meters high. Extraction will be facilitated through a rear plenum wall equipped with glass fibre filter material known as paint stop. Two fans will generate air flow and filtered air will be discharged through two stacks situated 3 meters above roof level. A construction drawing of the proposed booth is shown in Figure 3 of the issued works approval. Construction works are estimated to take three days between the hours of 8am and 5pm and the facility's operating hours are between 6am and 10pm Monday to Friday.

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 works approval W6846/2023/1. 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 W6846/2023/1.

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 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 the metal coating booth	Air / windborne pathway	None
Noise		Air / windborne pathway	None
Operation			
Noise	Metal coating and air extraction	Air / windborne pathway	None
Paint odours			<ul style="list-style-type: none">Booth and filtration system to be constructed in accordance with AS/NZS4114:2020 <i>Spray painting booths, designated spray painting areas and paint mixing rooms</i>.Scheduled preventative maintenance tasks are to be performed including daily inspection of the ventilation and extraction system to ensure that all air from the booth passes through the system, and no visible paint escapes the booth.On-going air velocity monitoring.On-going filter effectiveness monitoring via manometers.On-going monitoring of stack for visible discharge.
Paint overspray			
Contaminated water or paint spillage	Paint handling	Direct discharge to land causing soil contamination	<ul style="list-style-type: none">Booth to be constructed atop a concrete slab

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	Approximate distance from prescribed activity
Closest Residential receptor located on Guilford Rd	225 m south east from the proposed painting booth and 87m from the premises boundary
Cyril Jackson High School	450 m south east from the proposed painting booth

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 W6846/2023/1 that accompanies this decision report authorises construction only. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015). As the premises is already registered under R2496/2019/1, following completion of the works the spray painting booth will not require any further authorisation for operation under Part V of the EP Act. The premises will however be required to operate under the *Environmental Protection (Metal Coating) Regulations 2001*.

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

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 See Table 1				
Construction								
Construction of the metal coating booth	Dust	Air / windborne pathway causing impacts to health and amenity	Residences 225m south east	None.	C = Slight L = Rare Low Risk	Y	N/A	The delegated office does not foresee receptors to be impacted due to the short timeframe of the construction works being for ~ three days, the distance to receptors >200m and the works occurring within an industrial estate. The provisions of the Environmental Protection (Noise) Regulations 1997 are also applicable.
	Noise				C = Slight L = Rare Low Risk	Y		
Operation								
Operation Of the metal coating booth	Paint Overspray	Air / windborne pathway causing impacts to health and amenity	Residences 225m south east	Refer to Section 3.1	C = Slight L = Rare Low Risk	Y	Condition 1: Design and construction requirements	The applicant's proposed construction and installation specifications are considered suitable to minimise the likelihood of impacts to receptors associated with paint fumes, over spray, noise and contaminated water/spills. These specifications have been conditioned as construction and installation requirements. Operation of the new infrastructure on the premises will be required to comply with the Environmental Protection (Metal Coating) Regulations 2001.
	Paint odours				C = Slight L = Rare Low Risk	Y		
	Noise				C = Slight L = Rare Low Risk	Y		
	Sediment laden stormwater	Direct discharge to land causing soil contamination	Soils within the premises	Refer to Section 3.1	C = Slight L = Rare Low Risk	Y		

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 17 October 2023	None received	N/A
Local Government Authority advised of proposal on 17 October 2023	The City of Bassendean replied on 25 October 2023 indicating that the proposal was not consistent with the current development approval for the site and requested that the development approval needed to be amended by the applicant.	The delegated officer will not make a final determination on the application until evidence has been provided to support that development approval consistent with this application has been granted.
Applicant was provided with draft documents on 31 October 2023	The applicant replied on 15 November 2023, comments received are summarised in Appendix 1.	Response summarised in Appendix 1.

5. Decision

The delegated officer has determined that the proposal to construct an additional paint booth at their registered premises does not pose an unacceptable level of risk to offsite receptors. This determination is based on the following:

- the spray booth being constructed in accordance with the Australian/New Zealand Standard 4114.2020 Spray painting booths, designated spray-painting areas, and paint mixing rooms;
- the location of the spray booth being within Bradken's existing metal coating premises in an industrial park, with the nearest sensitive receptors being >200m from the spray booth which is considered sufficient separation as per EPA's Guidance Statement No. 3 (EPA, 2005) for the industry; and
- the applicant's history as the department has no recorded complaints relating to paint odours, overspray or noise for the premises within the internal incident and complaints management system.

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.

The premises is registered under section 5B of the EP Regulations for category 81 metal coating, with an assessed design capacity of 32,000L of paint per year (R2496/2019/1). However, the installation of the new paint booth increases the design capacity to 50,000L of paint per year, exceeding the capacity specified in Registration R2496/2019/1. Therefore, the applicant is expected to submit an application for a registration to reflect the increased operational capacity.

References

1. Environmental Protection Authority (EPA) 2005, *Guidance for the Assessment of Environmental Factors - Separation Distances between Industrial and Sensitive Land Uses No. 3*, Perth, Western Australia
2. Environmental Protection (Metal Coating) Regulations 2001.
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.

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

Summary of applicant's comment	Department's response
Applicant confirmed that the installation of the new paint booth would increase the design capacity of the entire facility to 50,000 litres of paint per year.	The delegated officer notes that this capacity exceeds the assessed design capacity for Bradken's Registration R2496/2019/1. The decision section has been updated accordingly.
Applicant requested that the due date for the Environmental compliance report required by condition 2 be extended to 60 days after the installation of infrastructure.	The due date has been extended to 60 days post infrastructure installation as specified within condition 2.
Applicant provided an amended development approval for the paint booth consistent with this works approval.	Since evidence of planning approval has been provided the delegated officer is granting the works approval.