



## Application for Works Approval

### Division 3, Part V *Environmental Protection Act 1986*

**Works Approval Number** W6192/2018/1

**Applicant** AB No 2 Pty Ltd as Trustee for Culford Unit Trust  
T/A Culford Agri Industry

**ACN** 159 232 881

**File Number** DER2018/001561

**Premises** Culford Quarry  
6364 Albany Highway  
BANNISTER WA 6390  
Being Part of Lot 11 on Plan 2767 as defined by the following coordinates and depicted in Figure 1:

Reference	Latitude	Longitude
A	-32.5730	116.4367
B	-32.5756	116.4394
C	-32.5796	116.4363
D	-32.5796	116.4333
E	-32.5729	116.4311
F	-32.5724	116.4327
G	-32.5733	116.4359
H	-32.5733	116.4363

**Date of Report** 29 January 2019

## 1. Definitions

In this Decision Report, the terms in the Table below have the meanings defined.

Term	Definition
ACN	Australian Company Number
Category/ Categories/ Cat.	Categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
Decision Report	refers to this document.
Delegated Officer	an officer under section 20 of the EP Act.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation As of 1 July 2017, the Department of Environment Regulation (DER), the Office of the Environmental Protection Authority (OEPA) and the Department of Water (DoW) amalgamated to form the Department of Water and Environmental Regulation (DWER). DWER was established under section 35 of the <i>Public Sector Management Act 1994</i> and is responsible for the administration of the <i>Environmental Protection Act 1986</i> along with other legislation.
Emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Occupier	has the same meaning given to that term under the EP Act.
PMA	Precinct Management Area (offsite, see Figure 1)
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report
Risk Event	As described in <i>Guidance Statement: Risk Assessment</i>
Works Approval Holder	AB No 2 Pty Ltd

## 2. Overview of premises

### 1.1 Classification of premises

Classification of Premises	Description	Approved Premises production or design capacity or throughput
Category 12	Screening etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	50,000 tpa

### 1.2 Description of proposed activity

AB No 2 Pty Ltd (the Applicant) proposes to screen up to 50,000 tonnes per year of material extracted from the Culford Quarry which is situated within the larger Culford Farm. The Quarry is located approximately 98 km south east of Perth and 25 km north of the Township of Boddington. The quarry will be comprised of a 6.6 hectare area and is estimated to contain 190,000 m<sup>3</sup> of gravel for extraction. The premises is predominantly covered by a Bluegum plantation and includes an existing gravel pit which is intended to be initially used before proceeding into a new excavation pit as shown in Figure 1 below.

Operations are proposed in two phases, the first of which includes preparation of existing excavation area to allow for gravel excavation and processing. The second phase will consist of harvesting the Bluegum plantation and screening of the excavated gravel to prepare road base materials, categorised as sub base gravel and base course gravel. The clearing activities do not require a permit clearing for native vegetation. Crushing of the excavated material and additional processing through an onsite Pug Mill may be required. These activities are considered to be consistent within the category 12 activities.



**Figure 1: Site Layout Plan**

*Image provided as part of works approval supporting documentation*

The infrastructure and equipment are outlined in the table below.

Ref	Infrastructure or Equipment	Site Layout Plan Reference (Figure 1)
1	Dozer (capacity up to 250 m <sup>3</sup> /hour)	Existing Pit then moving into the New Pit area
2	Front end loader (capacity up to 120 m <sup>3</sup> /hour)	
3	Water cart	
4	Screening Plant (capacity between 80 to 200 m <sup>3</sup> /hour)	
5	Crushing Plant (capacity between 80 to 200 m <sup>3</sup> /hour)	
6	Pug Mill (capacity not exceeding 200 m <sup>3</sup> /hour)	
7	Stormwater sump	Stormwater dam

Additional machinery/equipment associated with the prescribed activities, such as water cart, fuel storage tanks and front end loaders, are being stored on the adjacent Precinct Management Area (shown in yellow highlight in Figure 2 below) which is excluded from the prescribed premises boundary.



**Figure 2: Overview of Culford Farm depicting the Precinct Management Area**  
*Image provided as part of works approval supporting documentation*

### 3. Legislative context and other approvals

Other than placement of screening equipment and associated machinery, no other works are proposed under this application. Approvals relevant to the premises are outlined in the table below.

Legislation	Number	Approval
<i>Mining Act 1978</i>	N/A	The Applicant has confirmed that no DMIRS approval is required as the premises is not situated on a mining tenement.
<i>Planning and Development Act 2005</i>	Shire of Boddington reference A1674	The Shire of Boddington granted conditional Development Approval for the gravel pit on 21/12/2018. Development must be substantially commenced within two years of the approval being granted.

## 4. Emission sources, pathways and receptors

### 3.1 Emissions

The potential for emissions to impact on sensitive receptors has been assessed in accordance with the Department's Risk Framework. The key emissions considered in this report are **dust and noise** from activities including screening and crushing equipment placement and use, and vehicle movements during construction.

The Applicant has proposed measures to assist in controlling these emissions, where necessary. The control measures have been considered when undertaking the risk assessment detailed in Section 5.

Following completion and compliance with this works approval, a prescribed premises category 12 licence under Part V of the EP Act will be required to authorise emissions associated with the operation of the premises i.e. screening and related activities, including vehicle movements, excavation, loading and unloading and storage of materials. A risk assessment for the operational phase has been included in this Decision Report, however licence conditions will not be finalised until DWER assesses the licence application.

### 3.2 Receptors

Risk is assessed as a combination of emission sources, the proximity and sensitivity of receptors to those emission sources and any pathways that can allow the emission to reach and potentially harm the receptor. Figure 3 provides an overview of human receptors in proximity to the premises and the table below provides a summary of the key human and environmental receptors in proximity to the premises. The risk assessment in Section 5 considers these receptors in the context of emissions and potential pathways.

Receptor	Distance from Prescribed Premises
<b>Human receptors</b>	
Farm caretakers residence (owned by the Applicant)	Approximately 420m north
Three Ways Roadhouse (service station with no accommodation)	Approximately 800m south east
Residential dwelling	6.5km south
<b>Environmental receptors</b>	
Seasonal minor surface water creek system	80m south-east of Premises boundary

Seasonal minor surface water creek system	920m west of Premises boundary
Priority 2 Public Drinking Water Source Area (PDWSA) – Serpentine Dam Catchment Area	1.85 km north-west of Premises boundary
Threatened fauna (various)	<ul style="list-style-type: none"> <li>• Numbat – approximately 240m east of boundary;</li> <li>• Baudin’s Cockatoo – approximately 270m north of boundary;</li> <li>• Carnaby’s Cockatoo – approximately 960m south-east of boundary;</li> <li>• Chuditch/western quoll – approximately 1.3km south-east of boundary;</li> <li>• Forest red-tailed black Cockatoo – approximately 1.3km south-east of boundary;</li> <li>• Quenda/southern brown Bandicoot – approximately 1.3km south-east of boundary;</li> <li>• Peregrine falcon – approximately 1.45 km west, south-west of boundary;</li> <li>• White-tailed black Cockatoo – approximately 1.45 km west, south-west of boundary.</li> </ul>

### 3.3 Pathways

As dust and noise are considered potential emissions, the prevailing wind direction has been considered. Using information available on the Bureau of Meteorology’s website, the closest available weather station for climate data is Wandering (No. 010917). Based on the climate data for Wandering station (December 1998 to August 2018), the prevailing wind directions are northerly and south-westerly in the morning and north-westerly and westerly in the afternoon. These pathways have been considered in the risk assessment table in Section 5.



**Figure 3: Distance to sensitive human receptors**

*Image provided as part of works approval supporting documentation. Modified by DWER officers.*

## 5. Risk Assessment

Risk ratings have been assessed for each key emission source and take into account potential source-pathway-receptor linkages. The mitigation measures / controls proposed by the Applicant have been considered in determining the risk rating. Emissions during construction and operation have been assessed separately. This is because separate approvals are needed for each. The works approval that accompanies this report authorises construction only. A licence is required to operate the premises.

### 5.1 Risk assessment – construction

Risk Event				Consequence rating*	Likelihood rating*	Risk*	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
<p>Placement of screen and associated equipment including vehicle movements (reversing beepers).</p> <p>Construction of stormwater channels and stormwater sump.</p>	Dust	<p>Air/windborne pathway causing impacts to health and amenity of closest human receptors (Culford Farm caretaker's house and roadhouse) approximately 420m north and 800m south east from the premises respectively.</p>	<p>Unsealed roads to be wet down with water cart.</p> <p>Site traffic limited to 40 km/hour.</p> <p>Ongoing visual inspection for dust emissions. If required, additional dust control measures such as mulching, hydro seeding or use of chemical crusting agents can be used.</p>	Slight	Unlikely	Low	<p>The minor construction works (equipment placement) are not expected to generate significant dust emissions.</p> <p>The proposed controls are expected to be sufficient at mitigating dust emissions.</p>	N/A
	Noise		<p>Site traffic limited to 40 km/hour.</p> <p>Onsite Bluegum trees to provide noise mitigation.</p>					

\*Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

## 5.2 Risk assessment – operation (information only)\*

Risk Event				Consequence rating**	Likelihood rating**	Risk**	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities*	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
Excavation activities Screening activities Crushing activities Pug mill Unloading, loading and storage of material Vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity of closest human receptors (Culford Farm caretaker's house and roadhouse) approximately 420m north and 800m south-east from the premises respectively.	Unsealed roads and stockpiles to be wet down with water cart, portable sprinklers or hoses as required.  Crushing and screening plants fitted with water sprayers. Portable sprinklers/hoses can be utilised in the event of water spray malfunction.	Minor	Unlikely	Low	The Applicant's proposed dust mitigation controls are likely to be sufficient at mitigating dust emissions.	To be determined at licensing assessment stage*
		Air/windborne pathway causing impacts to surface water quality on seasonal minor surface water creek system (located 80m from premises boundary).	Site traffic limited to 40 km/hour.  Ongoing visual inspection for dust emissions. If required, additional dust control measures such as mulching, hydro seeding or use of chemical crusting agents can be used.	Moderate	Unlikely	Medium	The Applicant's proposed dust mitigation controls are likely to be sufficient at mitigating dust emissions however these may need to be included in the Licence as regulatory controls.	
		Air/windborne pathway causing impacts to threatened fauna habitats (closest fauna species identified 240m from premises boundary).		Moderate	Unlikely	Medium		

Risk Event				Consequence rating**	Likelihood rating**	Risk**	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities*	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
Excavation activities Screening activities Crushing activities Pug mill Unloading, loading and storage of material Vehicle movements	Noise	Air/windborne pathway causing impacts to health and amenity of closest highly sensitive noise areas (Culford Farm caretaker's house and roadhouse) approximately 420m north and 800m south-east from the premises respectively.	Operations proposed to occur between 6am and 5pm.  Regular machinery servicing.	Moderate	Possible	Medium	The proposed operational time of 6am is considered as 'night-time' hours in the <i>Environmental Protection (Noise) Regulations</i> (EP Noise Regulations) and is afforded a lower assigned decibel level. The Applicant has not provided information to demonstrate compliance with the EP Noise Regulations. This will need to be reconsidered as part of the licence assessment process.	To be determined at licensing assessment stage*
	Sediment	Overland runoff causing impacts to onsite flora, surface water and threatened fauna from the increase of suspended solids into the environment.	Stormwater drains constructed onsite will divert sediment away from the operational areas and into an onsite stormwater sump for infiltration. Sediments will be contained in this sump.	Minor	Unlikely	Low	The Applicant's proposed stormwater mitigation controls are likely to be sufficient at mitigating sediment emissions.	To be determined at licensing assessment stage*

\*The works approval that accompanies this Report authorises construction only. A licence is required for operations.

\*\*Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

## 6. Consultation

Method	Comments received	DWER response
Application advertised on DWER website 3/12/2018	No comments received	N/A
Applicant notified of draft 22/01/2019	The applicant confirmed they have no comments and requested the works approval be issued as soon as possible.	N/A

## 7. Conclusion

This assessment of the risks of construction activities on the premises has been undertaken with due consideration of a number of factors, including the documents and policies specified in this decision report (summarised in Appendix 1).

DWER notes that it may review the appropriateness and adequacy of controls at any time and that, following a review, DWER may initiate amendments to the approval under the EP Act.

DWER also notes, that, following completion and compliance with this works approval, a prescribed premises category 12 licence under Part V of the EP Act will be required to authorise emissions associated with the operation of the premises.

### **Tracey Hassell**

A/Manager Waste Industries  
Regulatory Services

Delegated Officer under section 20 of the *Environmental Protection Act 1986*

## Appendix 1: Key documents

Document title	Availability
Works Approval (W6183/2018/1) application form and supporting documentation (October 2018)	DWER records (A1732966; A1732975)
DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	
DER, August 2016. <i>Guidance Statement: Licence duration</i> . Department of Environment Regulation, Perth.	
DER, February 2017 <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	
DER, February 2017. <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.	