



# Works Approval

## *Environmental Protection Act 1986, Part V*

**Works Approval Holder:** Boral Resources (WA) Limited

**Works Approval Number:** W5881/2015/1

**Registered office:** AMP Building  
 Level 3, 40 Mount Street  
 NORTH SYDNEY NSW 2060

**ACN:** 008 686 904

**Premises address:** Boral Asphalt  
 90 McDowell Street  
 WELSHPOOL WA 6106  
 Being Lot 43 on Plan 3217 as depicted in Schedule 1

**Issue date:** Friday, 30 October 2015

**Commencement date:** Monday, 2 November 2015

**Expiry date:** Tuesday, 1 November 2016

The following category/s from the *Environmental Protection Regulations 1987* cause this Premises to be a prescribed premises for the purposes of the *Environmental Protection Act 1986*:

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
13	Crushing of building material: premises on which waste building or demolition material (for example bricks, stones or concrete) is crushed or cleaned.	1 000 tonnes or more per year	110 000 tpa
35	Asphalt Manufacturing	Not applicable	200 000 tpa
61A	Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated or discharged onto land.	1 000 tonnes or more per year	110 000 tpa

**Conditions**

This Works Approval is subject to the conditions set out in the attached pages.

Date signed: 30 October 2015

.....  
**Lauren Trott**  
 Officer delegated under section 20  
 of the *Environmental Protection Act 1986*



# Works Approval Conditions

## 1 General

### 1.1 Interpretation

1.1.1 In the Works Approval, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 In the Works Approval, unless the contrary intention appears:

**'Act'** means the *Environmental Protection Act 1986*;

**'CEO'** means Chief Executive Officer of the Department of Environment Regulation;

**'CEO'** for the purpose of correspondence means;  
Chief Executive Officer  
Department Administering the *Environmental Protection Act 1986*  
Locked Bag 33  
CLOISTERS SQUARE WA 6850  
Email: [info@der.wa.gov.au](mailto:info@der.wa.gov.au)

**'Premises'** means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Works Approval;

**'Schedule 1'** means Schedule 1 of this Works Approval unless otherwise stated;

**'Works Approval'** means this Works Approval numbered W5881/2015/1 and issued under the *Act*;

**'Works Approval Holder'** means the person or organisation named as the Works Approval Holder on page 1 of the Works Approval;

1.1.3 Any reference to an Australian or other standard in the Works Approval means the relevant parts of the standard in force from time to time during the term of this Works Approval.

1.1.4 Any reference to a guideline or code of practice in the Works Approval means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guidelines or code of practice made during the term of this Works Approval.

### 1.2 General conditions

1.2.1 The Works Approval Holder shall construct the works in accordance with the documentation detailed in Table 1.2.1:

<b>Table 1.2.1: Construction Requirements<sup>1</sup></b>		
<b>Document</b>	<b>Parts</b>	<b>Date of Document</b>
Boral Resources (WA) Welshpool Asphalt RAP Processing and Use Works Approval Application – Supporting Documentation	All	May 2015
Works Approval Application Form	All	17 July 2015

Note 1: Where the details and commitments of the documents listed in condition 1.2.1 are inconsistent with any other condition of this works approval, the conditions of this works approval shall prevail.



## **2 Information**

### **2.1 Reporting**

- 2.1.1 The Works Approval Holder shall submit a compliance document to the CEO, following the construction of the works and prior to commissioning of the same.
- 2.1.2 The compliance document shall:
- (a) certify that the works were constructed in accordance with the conditions of the works approval;
  - (b) be signed by a person authorised to represent the Works Approval Holder and contain the printed name and position of that person within the company.



## Schedule 1: Maps

### Premises map

The Premises is shown in the map below. The pink line depicts the Premises boundary.





# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Works Approval:** W5881/2015/1

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### **Decision**

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a works approval. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by: Peter Knol  
Senior Licensing Officer

Decision Document authorised by: Lauren Trott  
Delegated Officer



## Contents

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### 1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.



## 2 Administrative summary

Administrative details									
Application type	Works Approval <input checked="" type="checkbox"/> New Licence <input type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input type="checkbox"/>								
Activities that cause the premises to become prescribed premises	<table border="1"> <thead> <tr> <th>Category number(s)</th> <th>Assessed design capacity</th> </tr> </thead> <tbody> <tr> <td>35 Asphalt Manufacturing</td> <td>200 000 tpa</td> </tr> <tr> <td>13 Crushing of building material</td> <td>110 000 tpa of Reclaimed Asphalt Product (RAP)</td> </tr> <tr> <td>61A Solid waste</td> <td>110 000 tpa of RAP</td> </tr> </tbody> </table>	Category number(s)	Assessed design capacity	35 Asphalt Manufacturing	200 000 tpa	13 Crushing of building material	110 000 tpa of Reclaimed Asphalt Product (RAP)	61A Solid waste	110 000 tpa of RAP
	Category number(s)	Assessed design capacity							
	35 Asphalt Manufacturing	200 000 tpa							
	13 Crushing of building material	110 000 tpa of Reclaimed Asphalt Product (RAP)							
61A Solid waste	110 000 tpa of RAP								
Application verified	Date: 07/08/2015								
Application fee paid	Date: 14/08/2015								
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>								
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>								
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>								
Commercial-in-confidence claim outcome									
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>								
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	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"/>								
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Ministerial statement No: EPA Report No:								
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i> )?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input type="checkbox"/>								
Is the Premises within an Environmental Protection Policy (EPP) Area	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>								
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>								



### **3 Executive summary of proposal and assessment**

Boral Resources (WA) Ltd (Boral) operates an asphalt plant capable of producing up to 200,000 tonnes of product per year. The site is located in Welshpool approximately 1.1 kilometers from the nearest residence.

The asphalt plant uses a pug mill batching plant where raw inputs are placed in a pug mill to be ground and mixed with liquid bitumen. Aggregates are weighed and conveyed to a drum dryer where they are heated and then discharged to a screen stack via a hot elevator. In the screen stack, the aggregate is resized and stored in a series of five hot bins. Bitumen is stored in heated tanks adjacent to the plant and filler material (lime and dust from the baghouse filters) is stored in purpose built silos. These materials are weighed and fed into the pug mill (mixing unit) along with hot aggregate. The hot mixed asphalt product is then either delivered directly into a delivery truck or transferred to one of a series of three hot storage bins, pending delivery to off-site.

For an asphalt plant, the principle emissions of concern are emissions to air including particulates, sulfur dioxide, nitrogen dioxide, carbon monoxide, and odour. Process controls and a bag filter are used to control these emissions.

This Decision Document assesses the impacts of processing RAP and the introduction of a crusher and screener on site for this purpose. A maximum 110 000 tonnes per annum of RAP is to be processed on site.

Boral holds a licence for the premises but currently it does not allow the processing of RAP.

Boral proposes to hire crushing and screening equipment and then work on a campaign basis to crush and screen the RAP to the right size so it can be used in the asphalt manufacturing process. RAP will be stored on site in the open and after processing the RAP will initially also stored in exposed stockpiles. Before use in the manufacturing process the processed RAP will be stored within an enclosed RAP storage building capable of containing 500 tonnes.

Potential environmental issues with processing RAP are dust from the crushing and screening, increased VOC emissions during use in the asphalt manufacturing process and potential contamination of stormwater if RAP contains contaminated material. The works, bringing the equipment on site and preparing for operation, is likely to be a low risk activity.





## 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	W1.2.1	The proposed works are to bring a crusher/screener on site to crush and screen the unprocessed RAP stockpile and prepare this on a campaign basis for use in the asphalt manufacturing process.	Application supporting documentation
Premises operation	-	No conditions in the works approval proposed regarding premises operation.	
Emissions general	-	Any potential changes regarding emissions are discussed below.	N/A
Point source emissions to air including monitoring	N/A	<p><b>Operation</b></p> <p><u>Emission Description</u>  <i>Emission:</i> Potential increased VOC emissions from the pugmill.  <i>Impact:</i> Reduced local air quality and increased potential for odour to impact on neighboring industries  <i>Controls:</i> The RAP is not directly heated by the burners, but indirectly heated. Moisture content is managed for product quality control which in turn reduces the potential for steam generation in the process. Minimising moisture content reduces the risk of a increased VOC emissions.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Possible  <i>Risk Rating:</i> Moderate</p>	<p>Application supporting documentation</p> <p>General provisions of the Act</p>



<b>DECISION TABLE</b>			
<b>Works Approval / Licence section</b>	<b>Condition number W = Works Approval L= Licence</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
		<p><u>Regulatory Controls</u> There is the potential for an increase in VOC and associated odour emissions as a result of this proposal. Fumes from the pugmill are not extracted and discharged into atmosphere via the baghouse stack rather pose a risk as fugitive emissions. As such regulatory control via additional stack test requirements is not required. General provisions of the Act are sufficient to cover any unreasonable emissions of odourous fumes. DER will consider including acceptance criteria for RAP in the licence to ensure that RAP is as clean as possible and reduce the risk of significant VOC emissions. The licence will require amendment on completion of this proposal and prior to ongoing operations utilising RAP.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Residual Risk Rating:</i> Moderate</p>	
<b>Point source emissions to surface water including monitoring</b>	-	No point source emissions to surface water proposed for this works approval application.	
<b>Point source emissions to groundwater including monitoring</b>	-	No point source emissions to groundwater proposed for this works approval application.	
<b>Emissions to land including monitoring</b>	-	No emissions to land proposed for this works approval application.	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Fugitive emissions	-	<p><b>Operation</b></p> <p><u>Emission Description</u>  <i>Emission:</i> Dust emissions from stockpiles, crushing and screening operations within the premises  <i>Impact:</i> Nuisance impact on neighboring industrial properties immediately adjacent and residents located approximately 1km from the premise.  <i>Controls:</i> The proponent proposes to use existing dust management strategies including sprinklers to ensure no dust will leave the site from the processing of RAP. RAP is a less dusty product to process than virgin sand or aggregate which is stored on site. The crusher/screener has a dust suppression system to ensure that during the crushing/screening dust emissions will be minimised.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Possible  <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u>            Dust emissions are adequately regulated by general provisions of the EP Act and as such no specific dust conditions will be included in the licence.</p> <p><u>Residual Risk</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Possible  <i>Risk Rating:</i> Moderate</p>	<p>Application supporting documentation</p> <p>General provisions of the Act</p>
Odour	-	Odour emissions have been dealt with under point source emissions to air.	
Noise	-	Boral have stated that their proposal complies with the <i>Environmental Protection (Noise) Regulations 1997</i> .	
Monitoring general	-	General monitoring conditions are not proposed for this works approval application.	



<b>DECISION TABLE</b>			
<b>Works Approval / Licence section</b>	<b>Condition number W = Works Approval L= Licence</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
<b>Monitoring of inputs and outputs</b>	-	Condition monitoring inputs and outputs are not proposed for this works approval application.	
<b>Process monitoring</b>	-	Process monitoring conditions are not proposed for this works approval application.	
<b>Ambient quality monitoring</b>	-	Ambient quality monitoring conditions are not proposed for this works approval application.	
<b>Meteorological monitoring</b>	-	Meteorological monitoring conditions are not proposed for this works approval application.	
<b>Improvements</b>	-	Improvement conditions are not proposed for this works approval application.	
<b>Information</b>	W2.1.1 and W2.1.2	Following the completion of the works the Works Approval Holder is required to submit a compliance document to the CEO.	
<b>Works Approval Duration</b>		This proposal can be completed within a short time period. Therefore it is proposed to issue the works approval for a one year period. After completion of the works the licence will require amendment to cover the movement of the crusher/screener.	



## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
24/08/2015	Application advertised in West Australian (or other relevant newspaper)	No comments received	Not applicable.
30/11/15	Proponent sent a copy of draft instrument	No comments received	Not applicable



## 6 Risk Assessment

*Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management*

**Table 1: Emissions Risk Matrix**

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High