



Works Approval

Environmental Protection Act 1986, Part V

Works Approval Holder: Sika Australia Pty Ltd

Works Approval Number: W5949/2016/1

Registered office: 55 Elizabeth Street,
WETHERILL PARK
NSW 2164

ACN: 001 342 329

Premises address: Lot 159 Bushland Ridge
BIBRA LAKE WA 6163

being Lot 159 on Plan 401594
Certificate of Title Volume 2842 Folio 586

Issue date: Wednesday, 23 March 2016

Commencement date: Monday, 28 March 2016

Expiry date: Wednesday, 27 March 2019

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
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	5,000 tonnes or more per year	3,300,000 tonnes per annual period
77	Concrete Batching or cement products manufacturing: premises on which cement products or concrete are manufactured for use at places or premises other than those premises.	100 tonnes or more per year	15,000 tonnes per annual period

Conditions

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

Date signed: 23 March 2016

.....
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

'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 W5949/2016/1 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:

Table 1.2.1: Construction Requirements ¹		
Document	Parts	Date of Document
Works Approval Application Form	All	Submitted to DER 16 December 2015
Abarta EHS Management Pty Ltd - Environmental Protection Act – Part V Works Approval Application Sika Australia Pty Ltd, Lot 159 Bushland Ridge Bibra Lake WA November 2015 – Rev 2 January 2016	All, including Drawings and Appendices	January 2016
Email Adendum: Sika Australia Pty Ltd: Works Approval Application Revised Document	All	Received by DER 27 January 2016

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; and
- (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 red area depicts the Premises.





Decision Document

Environmental Protection Act 1986, Part V

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Registered address: 55 Elizabeth Street,
WETHERILL PARK
NSW 2164

Premises address: Lot 159 Bushland Ridge
BIBRA LAKE
WA 6965

Issue date: Wednesday, 23 March 2016

Commencement date: Monday, 28 March 2016

Expiry date: Wednesday, 27 March 2019

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 and legal requirements and that the Works Approval and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Richard Wilson
Licensing Officer

Decision Document authorised by: Lauren Trott
Delegated Officer



Contents

Decision Document	1
Contents	2
1 Purpose of this Document	2
2 Administrative summary	3
3 Executive summary of proposal	4
4 Decision table	6
5 Advertisement and consultation table	14
6 Risk Assessment	14

1 Purpose of this Document

This decision document explains how DER has assessed and determined the application for a works approval or licence, 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"/> Registration <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	75	3,300,000 tonnes per annual period
	77	15,000 tonnes per annual period
Application verified	Date: 3 February 2016	
Application fee paid	Date: 25 February 2016	
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	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
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 checked="" 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

Sika Australia Pty Ltd (Sika) manufacture formulated cement additives for the construction industry.

Sika is proposing to relocate its current operations at Canning Vale to a new “green-field” site at Lot 159 Bushland Ridge, Bibra Lake. It also intends to increase the range and quantities of products it can manufacture at this new location.

The new Sika premises will include the following operations:

Cement Products Manufacturing Plant

This facility is for the manufacture and packaging of a range of specialised (dry) pre-mixed cement based products.

Standard commercial cement powder and sand supplied from bulk silos are blended with various proprietary additives supplied from various bins/drums/bags as required to the blend in a mixing machine and then packed in 20 kg bags for subsequent wholesale and retail supply.

The blending and packaging system will be located inside a warehouse; with silos, the mixer and other equipment connected to dust control equipment that will ultimately discharge to the atmosphere.

Cement and sand will be delivered to site in bulk powder tankers; other ingredients will be procured in packages/bulki-bags.

Admixture Blending Plant

This facility comprises a number of bulk storage tanks, mixing vessels and related transfer equipment for storage, blending and packaging of a range of liquid concrete additive products for industrial applications.

The system will be located inside a warehouse building.

Some of the additives used in the admixture blending plant are classified as dangerous goods (DG) and this facility is therefore designed; and will be constructed, operated and licensed in compliance to the requirements of the *Dangerous Goods Safety Act 2004* and the DG Regulations.

Warehousing Facilities:

For the warehousing of products both manufactured on site and obtained from external sources for retail distribution and supply.

A Wastewater Treatment Facility:

For the on-site storage and treatment of liquid wastes associated with the above activities prior to its licensed disposal to Water Corporation sewer. An assessment of the wastewater treatment facility has not been conducted as the resulting discharge is regulated by Water Corporation licence requirements.



Offices and an In-house Analytical Laboratory –

To provide administrative and analytical support to the site operational activities

Other than in the north-east quadrant, which is occupied by the Beeliar Regional Park which includes a bush forever site, surrounding areas are zoned “industrial”, with the nearest residential area, Yangebup, located 800 m to the south-east of the site.

As a range of dangerous goods products will be stored and handled on this site it has been designed and will be built and operated in a manner intended to satisfy the requirements of the *Dangerous Goods Safety Act 2004* and supporting Regulations.

Planning approval for the premises was granted by the City of Cockburn on 5 March 2015.



4 Decision table

All applications are assessed under the Environmental Protection Act 1986, the Environmental Protection Regulations 1987, DER's Corporate Policy Statement No.7 – Operational Risk Management and the risk matrix attached to this Decision Document in Section 6. Where other references have been used in making the decision they are detailed in the decision table.

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	NA	<p>Construction</p> <p>There is unlikely to be any significant emissions from the construction of the plant. Where there is potential for an emission an assessment has been conducted in the following sections.</p> <p>Operation</p> <p><u>Emission Description</u></p> <p><i>Emission:</i> Stormwater contaminated with cement dust or environmentally hazardous materials such as truck wash water and liquid admixtures leaving the premises by running off the hardstand area.</p> <p><i>Impact:</i> Localised contamination of soil with alkaline cement dust or liquid which has left the premises. There is a surface water body (South Lake) approximately 500m to the north east of the premises. Minor localised impacts from the premises could potentially impact the lake and result in a reduction of water quality.</p> <p><i>Controls:</i> With the exception of landscaped areas, the entire site will be hardstand draining to soakwells with operations area draining to lined sumps that will be treated by the wastewater treatment plant.</p> <p><u>Risk Assessment</u></p> <p><i>Consequence:</i> Minor</p> <p><i>Likelihood:</i> Rare</p>	<p>Application supporting documentation; Abarta EHS Management Pty Ltd - Environmental Protection Act – Part V Works Approval Application Sika Australian Pty Ltd, Lot 159 Bushland Ridge Bibra Lake WA November 2015 – Rev 2 January 2016</p> <p><i>Environmental Protection (Concrete Batching and Cement Product manufacturing) Regulations 1998</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><i>Risk Rating: Low</i></p> <p><u>Regulatory Controls</u> When operational, the site is required to meet the requirements of the <i>Environmental Protection (Concrete Batching and Cement Product manufacturing) Regulations 1998</i>.</p> <p>These regulations adequately minimise the risk posed by stormwater contamination and works approval conditions are not considered necessary.</p> <p><u>Residual Risk</u> <i>Consequence: Minor</i> <i>Likelihood: Rare</i> <i>Risk Rating: Low</i></p>	
Emissions general	NA	<p>General Emissions will be regulated under the <i>Environmental Protection (Concrete Batching and Cement Product manufacturing) Regulations 1998</i> and the <i>Environmental Protection (Unauthorised Discharge) Regulations 2004</i>.</p>	<p>Application supporting documentation; Abarta EHS Management Pty Ltd - Environmental Protection Act – Part V Works Approval Application Sika Australian Pty Ltd, Lot 159 Bushland Ridge Bibra Lake WA November 2015 – Rev 2 January 2016</p> <p><i>Environmental Protection (Concrete Batching and Cement Product manufacturing) Regulations 1998</i></p>



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Point source emissions to air including monitoring	NA	<p>Construction There are no proposed point source emissions to air during construction of the premises.</p> <p>Operation <u>Emission Description</u> <i>Emission:</i> Concrete dust emissions from silos during normal and abnormal operations. Abnormal operations would include the failure of the dust filtration systems such as a damaged bag filter. <i>Impact:</i> Inhalation and deposition of dust (including PM₁₀) may affect neighbouring businesses, residents and the environment. Concrete dust has the potential to cause health effects and be a nuisance. The nearest residence is approximately 800m south east of the premises. There are other businesses such as offices and light industries directly adjacent to the premises.</p> <p><i>Controls:</i> Each silo will be fitted with reverse pulse dust extraction filters and overfill protection equipment (e.g. alarms), as per the requirements of the <i>Environmental Protection (Concrete Batching and Cement Product manufacturing) Regulations 1998</i> which dictate that dust emissions will be less than 50mg/m³.</p> <p>The manufacturer's efficiency specification for the proposed dust collection system is 99.92% at 0.5 microns.</p> <p>Dust filters are self-cleaning but can be cleaned by pulsation which will occur every 2 batches. A magnehelic gauge will be fitted across the filters to monitor efficiency of filters and will be linked to an alarm system that will activate if the pressure is outside the pre-set parameters. If an alarm is triggered the process will be stopped</p>	<p>Application supporting documentation</p> <p><i>Environmental Protection (Concrete Batching and Cement Product manufacturing) Regulations 1998</i></p> <p>SIKA Australia Pty Ltd Lot 159 Bushland Ridge, Bibra Lake WA Dust Management Plan November 2015</p>



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		<p>immediately and not restarted until the problems has been identified and rectified.</p> <p>The proponent has committed to having the filters inspected every 6 months by an accredited contractor.</p> <p>These controls will help reduce the instances of abnormal operations and reduce dust emissions during normal operations.</p> <p>The site has a Dust Management Plan that outlines how dust emissions will be mitigated and managed, including training of staff, and maintenance of dust control equipment.</p> <p><u>Risk Assessment for Normal Operations</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Risk Assessment for Abnormal Operations</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> The site will be required to operate in accordance with the <i>Environmental Protection (Concrete Batching and Cement Product manufacturing) Regulations 1998</i>. No additional controls or works approval conditions beyond these requirements are considered</p>	



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		<p>necessary.</p> <p><u>Residual Risk Normal Operations</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Residual Risk Abnormal Operations</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p>	
Fugitive emissions	NA	<p>Construction There is not expected to be significant dust emissions from the construction of the site. The nearest residence is approximately 800m south east of the premises and there are other businesses directly adjacent to the premises.</p> <p>Operation <u>Emission Description</u> <i>Emission:</i> Dust from fugitive sources including movement of materials on site. <i>Impact:</i> Inhalation and deposition of dust may affect neighbouring businesses, residents and the environment. Dust has the potential to cause minor reversible health effects and be a nuisance. The nearest residence is approximately 800m south east of the premises and there are other businesses directly adjacent to the premises. <i>Controls:</i> All materials capable of generating dust are stored within</p>	<p>Application supporting documentation; Abarta EHS Management Pty Ltd - Environmental Protection Act – Part V Works Approval Application Sika Australian Pty Ltd, Lot 159 Bushland Ridge Bibra Lake WA November 2015 – Rev 2 January 2016</p> <p><i>Environmental Protection (Concrete Batching and Cement Product manufacturing) Regulations 1998</i></p>



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		<p>silos or within buildings and are packaged prior to leaving site. The silos will have dust filters.</p> <p>The site has a dust management plan that outlines actions to be taken to ensure dust emissions are mitigated as well as when actions need to occur and who is responsible for each action.</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> <i>Environmental Protection (Concrete Batching and Cement Product manufacturing) Regulations 1998</i>, including specifications for air emissions.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p>	
Noise	NA	<p>Construction</p> <p><u>Emission Description</u> <i>Emission:</i> Noise from the site construction including site traffic. <i>Impact:</i> Neighbouring businesses and residents being impacted by noise emissions. The nearest residential property to the premises is approximately 800m south east of the proposed plant. <i>Controls:</i> Construction of the plant will only take place during day light hours.</p>	<p>Application supporting documentation; Abarta EHS Management Pty Ltd - Environmental Protection Act – Part V Works Approval Application Sika Australian Pty Ltd, Lot 159 Bushland Ridge Bibra Lake WA November 2015 – Rev 2 January 2016</p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Possible <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> Noise emissions from construction of the facility are expected to comply with the <i>Environmental Protection (Noise) Regulations 1997</i>.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Possible <i>Risk Rating:</i> Low</p> <p>Operation <u>Emission Description</u> <i>Emission:</i> Noise from the site operations including site traffic, loading of silos, hoppers and trucks. <i>Impact:</i> Neighbouring businesses and residents being impacted by noise emissions from the premises operations. The site is located within an area that is zoned industrial. The nearest residential property to the premises is within an 800m radius of the plant. <i>Controls:</i> All blending and mixing of materials will take place within the buildings on site. The blending operations will only take place 6am to 4pm weekdays and with the warehouse occasionally open on Saturday 6am – 4pm.</p>	<p><i>Environmental Protection (Concrete Batching and Cement Product manufacturing) Regulations 1998</i></p> <p><i>Environmental Protection (Noise) Regulations 1997</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Possible <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> The site will be subject to the Noise Regulations. Noise emissions from operation of the facility are expected to comply with the <i>Environmental Protection (Noise) Regulations 1997</i>.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Possible <i>Risk Rating:</i> Low</p>	
Duration	NA	The works approval has been issued for a period of 3 years.	NA



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
7/3/2016	Application advertised in West Australian	No comments received	N/A
21/03/2016	Proponent sent a copy of draft instrument	No comments received	N/A

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