



Works Approval

Environmental Protection Act 1986, Part V

Works Approval Holder: Coogee Chemicals Pty Ltd

Works Approval Number: W5918/2015/1

Registered office: Lot 4 Kwinana Beach Road
KWINANA BEACH WA 6167

ACN: 008 747 500

Premises address: Coogee Chemicals Pty Ltd
4 Kwinana Beach Road
KWINANA BEACH WA 6167
Being Lot 4 on Diagram 79783, Lot 506 on Diagram 61889, Lot 801 on Plan 68876, Lot 12 on Plan 21876, Lot 3 on Diagram 79782 and Part Lot 9002 on Plan 68876

Issue date: Thursday, 10 December 2015

Commencement date: Monday, 14 December 2015

Expiry date: Sunday, 9 December 2018

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
31	Chemical manufacturing: premises (other than premises within category 32) on which chemical products are manufactured by a chemical process.	100 tonnes or more per year	100,000 tonnes per annual period
33	Chemical blending or mixing: 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.	500 tonnes or more per year	18,250 tonnes per annual period
73	Bulk storage of chemicals etc.: premises on which acids, alkalis or chemicals that — (a) contain at least one carbon to carbon bond; and (b) are liquid at STP (standard temperature and pressure), are stored.	1 000 m ³ in aggregate	180,000 m ³ in aggregate



Conditions

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

.....
10 December 2015

Ed Schuller

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 W5918/2015/1 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:

Table 1.2.1: Construction Requirements ¹		
Document	Parts	Date of Document
Works Approval Application Form	All	4 September 2015
Works Approval Application Modification of Toluene Storage Tank S13 at Coogee Chemicals South Tank Terminal	All, including Drawings and Appendices	2 September 2015
Email from Brian Gardner, with subject “works approval application on AIN rxf2yg – update to application drawings”	Attachments	12 October 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

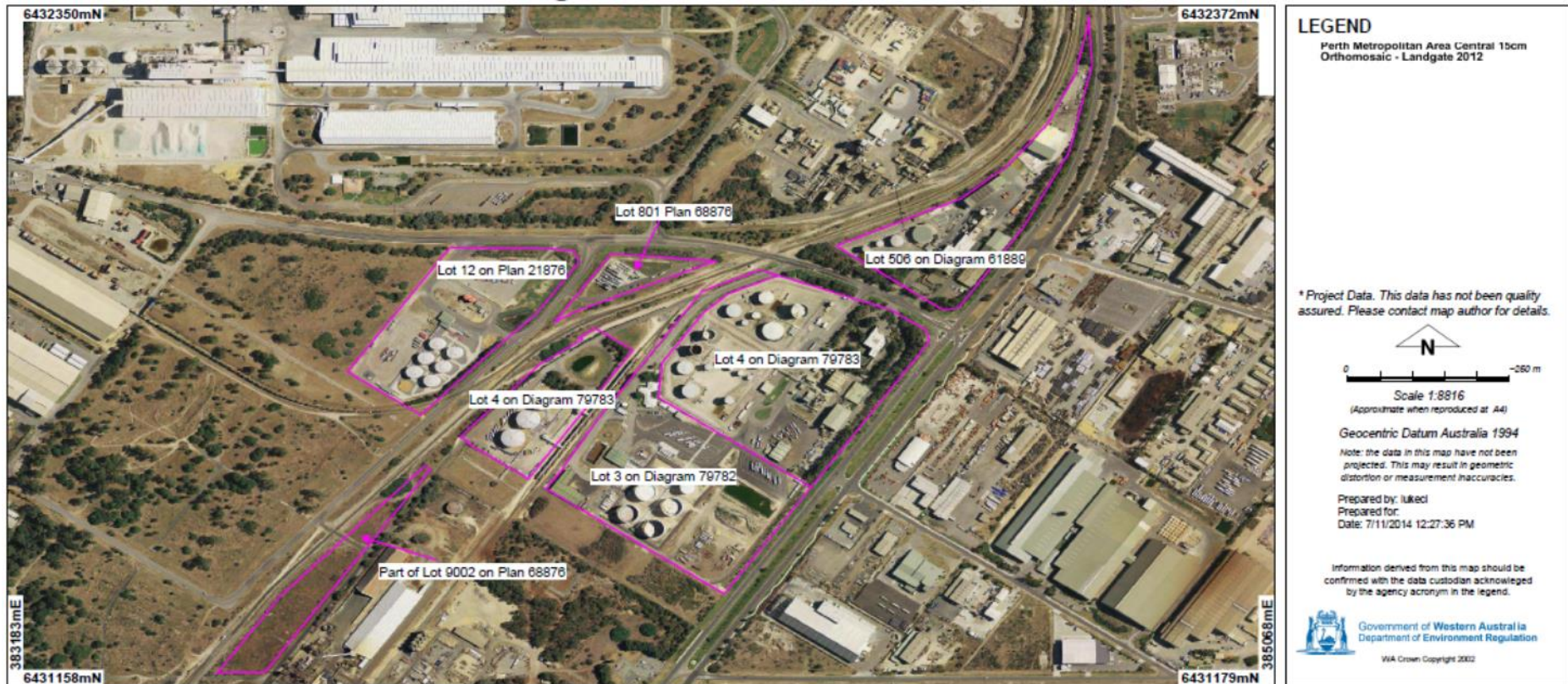
- 2.1.1 The Works Approval Holder shall submit a compliance document to the CEO, following the construction of the works and prior to commissioning of the same.
- 2.1.2 The compliance document shall:
- (a) certify that the works were constructed in accordance with the conditions of the works approval;
 - (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 purple line depicts the Premises boundary.





Decision Document

Environmental Protection Act 1986, Part V

Proponent: **Coogee Chemicals Pty Ltd**

Works Approval: **W5918/2015/1**

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 68876, Lot 12 on Plan 21876, Lot 3 on Diagram 79782 and Part Lot 9002
 on Plan 68876

Issue date: Thursday, 10 December 2015

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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: Ed Schuller
 Senior Manager Licensing (Process Industries)



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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 Administrativesummary

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	Category number(s)	Assessed design capacity
	31	100 000 tpa
	33	18 250 tpa
	73	180 000 m ³ in aggregate
Application verified	Date: 14/10/2015	
Application fee paid	Date: 23/10/2015	
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 checked="" type="checkbox"/> No <input type="checkbox"/> <i>Environmental Protection (Kwinana) (Atmospheric wastes) Policy 1999</i>		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.		

3 Executive summary of proposal and assessment

Coogee Chemicals Pty Ltd proposes to replace a the fixed nitrogen blanketed roof on storage tank S13 with a full contact type internal floating roof and the installation of a toluene slops handling system which consist of a 10m³ self bunded tank, radar/high level switch, diaphragm pump and pipeline connection to sullage tank and S13 Tank.

Coogee Chemicals Pty Ltd holds a licence for their premises on Kwinana Beach Road in Kwinana Beach. The main activity is chemical manufacturing, but also chemical blending and chemical storage occur within the premises.

The installation of an internal floating roof, as compared to a fixed nitrogen blanketed roof system will reduce fugitive VOC emissions from the tank and also increase safety.

The reduction of VOC emissions is achieved due to the reduced headspace in the tank and subsequent venting when the tank is filled. In a nitrogen blanketed tank, the toluene is still able to vaporise and mix with the nitrogen and when filled this headspace is vented to atmosphere. A floating roof has the effect of reducing the headspace to a bare minimum and thus barely any toluene is vaporised. Then during filling of the tank this headspace does not increase as the roof moves up with the liquid, and thus no venting of any of the toluene vapours.

Although floating roofs are intended to be as tight as possible to be installed against the wall of the tank, some minimal space is required for the roof to allow for movement up and down. Although seals are designed to close this as much as possible, it is not possible to eliminate vapour escape completely. Therefore a significant reduction of vapour emissions is expected.



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	N/A	The Works Approval will have general conditions to refer to the fact that the proponent has to construct it in accordance with the application and that a completion certificate has to be provided upon completion.	Application supporting documentation
Premises operation	N/A	No changes to conditions relating to Premises operation	N/A
Emissions general	W 1.2	<p>Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Certain liquid products that are being stored in Tank S13 evaporates under standard ambient temperature and pressure and these gasses are deemed Volatile Organic Compounds (VOC). In most cases these gases are highly flammable. If uncontrolled these liquids will evaporate and be released to atmosphere as a vapour. <i>Impact:</i> Reduced air quality. If exposed to Toluene one could experience irritation to the eyes, skin and nose, drowsiness and headaches. <i>Controls:</i> The proponent proposes to replace the nitrogen blanket on the fixed roof tank with a floating roof which will increase safety and is predicted to reduce VOC emissions significantly as compared to the current roof system.</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></p>	Application supporting documentation



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		Construction in accordance with proposed design. <u>Residual Risk</u> <i>Consequence</i> : Minor <i>Likelihood</i> : Possible <i>Risk Rating</i> : Moderate	
Point source emissions to air including monitoring	N/A	No changes to the point sources to air are proposed as a result of this works approval application.	N/A
Point source emissions to surface water including monitoring	N/A	No changes to the point sources to surface water are proposed as a result of this works approval application.	N/A
Point source emissions to groundwater including monitoring	N/A	No changes to point sources to groundwater are proposed as a result of this works approval application.	N/A
Emissions to land including monitoring	N/A	No changes to emissions to land are proposed as a result of this works approval application.	N/A
Fugitive emissions	N/A	See under Emissions general	N/A
Odour	N/A	Odour has not been assessed under Emissions general as VOC.	N/A
Noise	N/A	The plant operates 24 hours per day and is located within a heavy industrial area. Construction noise will be minimal and has not been deemed significant to assess.	N/A



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Monitoring general	N/A	N/A	N/A
Monitoring of inputs and outputs	N/A	N/A	N/A
Process monitoring	N/A	N/A	N/A
Ambient quality monitoring	N/A	N/A	N/A
Meteorological monitoring	N/A	N/A	N/A
Improvements	N/A	N/A	N/A
Information	N/A	N/A	N/A
Licence Duration	N/A	This works approval proposal has no impact on licence duration.	N/A



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
02/11/2015	Application advertised in West Australian (or other relevant newspaper)	No comments received	N/A
09/12/2015	Proponent sent a copy of draft instrument	Comments received on 10-12-2015 regarding some change of wording in the decision document.	Wording was changed.



6 Risk Assessment Matrix

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