



Application for Licence Amendment

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

Licence Number	L5109/1990/13
Licence Holder	Coogee Chemicals Pty Ltd
ACN	008 747 500
File Number	DEC5802/3
Premises	<p>Coogee Chemicals 4 Kwinana Beach Road Kwinana Beach</p> <p>Legal description –</p> <p>Lot 1 on Deposited Plan 402573, Lot 2 on Deposited Plan 402573, Lot 3 on Diagram 79782, Lot 12 on Plan 21876, Lot 506 on Diagram 61889, Lot 801 on Plan 68876 and Part of Lot 9002 on Plan 68876</p> <p>As defined by the Premises maps attached to the Revised Licence</p>
Date of Report	24 April 2024
Decision	Revised licence granted

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1. Decision summary

Licence L5109/1990/13 is held by Coogee Chemicals Pty Ltd (Licence Holder) for the Coogee Chemicals facility (the Premises), located at 4 Kwinana Beach Road, Kwinana Beach. This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L5109/1990/13 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the Department of Water and Environmental Regulation (DWER, department) has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at [DWER Regulatory documents | Western Australian Government \(www.wa.gov.au\)](http://www.wa.gov.au).

2.2 Application summary

On 23 August 2023 the Licence Holder submitted an application to the department to amend Licence L5109/1990/13 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The amendment being sought is to include operation of four additional 30,000 m³ fuel tanks constructed on Lot 3 on Diagram 79782.

The tanks will be used for diesel storage but incorporate design features which will enable conversion to flammable liquids storage. They are fitted with external dome roofs and lines for vapour recovery.

Table 1 below outlines the proposed changes to the Licence

Table 1: Proposed design capacity changes

Category	Current design throughput capacity	Proposed design capacity	Description of proposed amendment
Category 73: Bulk Storage of Chemicals	256,000 m ³	376,000 m ³	Increase due to addition of four new storage tanks
Category 31: Chemical Manufacturing	100,000 tonnes per annual period	NA	NA
Category 33: Chemical Blending and Mixing	18,250 tonnes per annual period	NA	NA

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 operation which have been considered in this Amendment Report are detailed in Table 2 below. Table 2 also details the control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Odour VOCs	Storage of volatile organic chemicals	Air/windborne pathway	Tanks are used for diesel, a low volatile liquid, however, they are equipped with lines for vapour recovery should they be converted to flammable liquids. The existing vapour recovery unit on the premises has adequate capacity if tanks are converted to flammable liquids.
Hydrocarbons and hydrocarbon contaminated water	Loss of containment from storage tanks or associated bunding.	Direct discharge to soils and infiltration to groundwater	Storage within tanks constructed in accordance with American Petroleum Institute (API) Standard 650 Welded Tanks for Oil Storage, Australian Standard (AS) 1692 Steel tanks for flammable and combustible liquids and AS 1940 The storage and handling of flammable and combustible liquids. Tanks are located within a concrete bund (with four compartments) with bund capacity in exceedance of that required in accordance with AS 1940. The storage and handling of flammable and combustible liquids requirements. Containment bunds drain to a sump from which contaminated water is pumped to a HDPE lined evaporation pond or uncontaminated water is pumped to an infiltration swale on the premises. The site Dangerous Goods Licence has been updated to include the new storage infrastructure.
		Overland flow	

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 3 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 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Single residence within the Kwinana Industrial Area.	660 metres west of boundary
Residential areas	2.5 km east to Calista and 2.5 km south-west to Cee and See Caravan Park.
Environmental receptors	Distance from activity / prescribed premises
Cockburn Sound	900 metres west from boundary
Underlying groundwater (non-potable purposes)	3.3 to 3.8 metres

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and take 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 Licence Holder 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 Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4. The Revised Licence L5109/1990/13 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises. The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4. Risk assessment of potential emissions and discharges from the Premises operation

Risk Event					Risk rating C = consequence L = likelihood	Applicant controls sufficient?	Conditions of licence	Reasoning
Source/ Activities	Potential emissions	Potential pathways and impact	Receptors	Licence holder controls				
Operation								
Storage of fuels	Hydrocarbons and hydrocarbon contaminated water	Direct discharge to soils and infiltration to ground water. Overland flow	Onsite soils Groundwater beneath premises Cockburn Sound	See section 3.1.1	C = Moderate L = Rare Medium	Y	Condition 1	The Delegated Officer considers the storage infrastructure has been constructed to suitable standards with adequate secondary containment and connection to the existing premises drainage and stormwater treatment system to suitably mitigate the risk of adverse impacts to surrounding land and surface water ecosystems associated with discharges from the infrastructure. Operational requirements have been incorporated in the licence to ensure the storage facility is operated and maintained as constructed to maintain an acceptable level of risk.
	Odour and VOC	Air/windborne pathway	Single residence 660 metres west of boundary and residential area 2.5 Km east	See section 3.1.1	C = Minor L = Rare Low	Y	NA	The Delegated Officer considers that the separation distance to sensitive receptors is sufficient to prevent odour and VOC emission impacting amenity or health when the tanks are used for diesel storage. If the tanks are converted to flammable liquid storage then the <i>Environmental Protection (Recovery of Vapours from the Transfer of Organic Liquids) Regulations 1995</i> will apply and the tanks have been constructed with vapour recovery piping which will be connected to the premises vapour recovery unit to enable vapour recovery in accordance with the Regulations.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal 4 October 2023	The City of Kwinana replied 19 October advising they had no comment.	Noted
Licence Holder was provided with draft amendment on 21 February 2024	The licence holder replied on 21 March 2024 advising that references to the sodium hydrosulphide plant be removed because it has been decommissioned and the magnesium powder plant as this plant was never constructed.	Updates were made to the licence to reflect the comments provided.

5. Decision

The delegated officer has assessed the application and determined that operation of the additional tanks does not represent an unacceptable risk to public health or the environment. In reaching this conclusion the delegated officer has considered the following:

- the tanks include vapour recovery piping which will allow for vapour recovery in the event the tanks are used for storage of flammable liquids;
- the tanks have been constructed in accordance with applicable standards;
- the tanks and bunding are consistent with AS1940 *The storage and handling of flammable and combustible liquids*; and
- the premises has existing water management infrastructure for management and storage of stormwater and spills from the infrastructure.

Licence updates

As part of the amendment the Delegated Officer has taken the opportunity to update the format of the licence to align with the department's current template, and to undertake amendments to remove references to decommissioned infrastructure and remove redundant works conditions due to the works being completed or not undertaken, and incorporate associated operational requirements into the licence.

In amending the licence, the delegated officer has:

- Updated the format and appearance of the licence.
- Revised condition numbers, and removed any redundant conditions and realigned condition numbers for numerical consistency.
- Corrected errors in the discharge criteria in Table 6 which occurred during the 2020 licence amendment as a result of being incorrectly transcribed from a prior Amendment Notice.
- Updated reporting and record keeping conditions consistent with the current DWER licensing format. In addition the environmental reporting frequency has been adjusted from biennial (as per the 2022 Notice of amendment and schedule of licences with

amended reporting conditions) to annual submission (as per the 2020 licence) due to the risk profile of the premises, and the information being required more frequently to inform compliance with monitoring requirements and limits.

- Incorporated equipment and infrastructure constructed under works conditions into the infrastructure table with associated operational requirements for works been completed in accordance with requirements of the licence. This includes operational requirements for the TiRO™ (titanium powder production) plant and the ferric sulphate plant.
- Removed requirements relating to the sodium hydrosulfide plant which has been decommissioned.

The obligations of the licence holder have not changed in updating and consolidating the licence therefore no additional risk assessment relating to previously assessed activities has been undertaken. The full details of the amendments to the licence are included in section 6.1.

6. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

6.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 6: Consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Conversion notes
1.1.1 1.1.2	Interpretation	Interpretation section	Revised interpretation to current licence format
1.1.2	Definitions	Definitions	Revised to current licence format & updated definitions
1.1.3 and 1.1.4	Australian standards and Guidelines or Code of Practice	Interpretation section	Redundant conditions removed and incorporated into interpretations as per current licence format.
1.2.1	Emissions		
1.2.2	Pollution control and monitoring equipment	N/A	Removed as a redundant condition. Maintenance and operational requirements for pollution control equipment have been incorporated into Condition 1 Table 1 of the licence.
1.2.3	Recovery and removal of spills	N/A	Removed as a redundant condition. Adequately covered by Environmental Protection (Unauthorised Discharges) Regulations 2004.

Existing condition	Condition summary	Revised licence condition	Conversion notes
1.2.4	Prevention of contamination and containment of contaminated stormwater	Condition 1	Removed as a redundant condition. Adequately covered by existing conditions relating to discharge of water and infrastructure requirements in condition 1.
2.1.1	Record and investigate exceedances of limits or targets	Condition 18	Replaced by condition 18.
2.2.1	Authorised emission points to air	Condition 4	New numbering and update to wording format. Pollution control requirements have been moved from authorised emissions table to the operational requirements Table 1. Emission points which were not constructed/no longer in use deleted.
2.2.2	Limits on emissions to air	Condition 5	
2.2.3	Target on emission to air	NA	Removed as related to emissions from plant which has been decommissioned.
2.2.4	Management action on breach of target	NA	
2.2.5	No discharge of process water to land	Condition 3	New numbering and update to wording format.
2.2.6	Discharge of stormwater	Condition 6	New numbering and update to wording format. Parameters revised to match Amendment Notice 2 as they were incorrectly transposed into the 2020 amended licence.
2.3.1	Dust emissions	Condition 2	New numbering and update to wording format
2.4.1	Odour emissions	NA	Removed as a redundant condition as requirements are adequately covered by Section 49 of the <i>Environmental Protection Act 1986</i> Deleted from licence.
3.1.1	NATA accreditation of laboratories	Condition 7	New numbering and update to wording format
3.1.2	Annual monitoring	Condition 8	
3.1.3	Record throughput data	Condition 9	
3.2.1	Monitoring of point source emissions to air	Condition 10	

Existing condition	Condition summary	Revised licence condition	Conversion notes
3.2.2	NATA accreditation for non-continuous monitoring	Condition 11	
4.1.1	Records	Condition 14	
4.1.2	Persons left in charge to be aware of conditions	NA	Removed as a redundant condition.
4.1.3	AACR	Condition 13	New numbering and update to wording format
4.1.4	Complaints	Condition 12	
4.2.1	Annual report	Condition 16	New numbering and update to wording format. Note the reporting frequency has been reverted to annual (not biennial) due to the risk profile of the premises and information on monitoring and compliance with limits being required to review compliance.
4.2.2 and 4.2.3	Annual Report	Condition 17	New numbering and update to wording format
4.3.1	Notification	Condition 18	
5.1.1 to 5.1.8	Works	Condition 1	Works complete and compliance documents submitted - redundant conditions deleted from licence and replaced with operational requirements for newly constructed infrastructure in Table 1.
Schedule 2 Reporting & notifications	Annual Audit Compliance Report Form N1 Notification	N/A	Redundant attachment. Deleted from licence Forms accessed at www.dwer.wa.gov.au

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. Coogee Chemicals 2023, Application for Licence Amendment Perth Western Australia