Permit[1]

Environmental Protection Act 1994

Environmental authority

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Permit[1] number: EPPR00693113

Environmental authority takes effect on 11 August 2015.

The anniversary date of this environmental authority is the same day (1 June) each year as the effective date. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
Coogee Chemicals Pty Ltd	Lot 4 Patterson Road KWINANA BEACH WA 6167

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
7-(5c) Chemical manufacturing >10000t but <100000t yr 7-(6c) Chemical manufacturing >10000t but <100000t yr	9-11 Northridge Road MOUNT ISA - Lot 2 Plan RP909834

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

[1] Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.

Signature	Date
J.A.H. Mackenzie	11 - AUG - 2015

James Mackenzie
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
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Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

The environmentally relevant activity(ies) conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

Part 1 – Conditions relevant to all activities (Xanthate/Metham Plant, Copper Sulphate Plant, Isotainer storage facility and sodium hydrosulphide dissolving plant)

Agency interest: General	
Condition number	**Condition**
G1	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable within 24 hours of becoming aware of the breach. **Records** must be kept including full details of the breach and any subsequent actions taken.
G2	All reasonable and practicable **measures** must be taken to prevent or minimise environmental harm caused by the activities.
G3	The **activity** must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the **activity** during routine operations and emergencies; and b) establish and maintain control **measures** that minimise the potential for environmental harm; and c) ensure plant, equipment and **measures** are maintained in a proper and effective condition; and d) ensure plant, equipment and **measures** are operated in a proper and effective manner; and e) ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994*; and f) ensure that reviews of environmental performance are undertaken at least annually.
G4	All **records** must be kept for a period of at least five years and provided to the **administering authority** upon request.

G5	Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system.**
G6	An **appropriately qualified person(s)** must monitor, record and interpret all parameters that are required to be monitored by this environmental authority.
G7	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the **administering authority** to investigate a complaint of **environmental nuisance** arising from the **activity**. The monitoring results must be provided within 10 business days to the **administering authority** upon its request.
G8	All flammable and combustible liquid storages must be designed, constructed and maintained in accordance with Australian Standard AS 1940 *Storage and Handling of Flammable and Combustible Liquids.*
Agency interest: Air	
Condition number	**Condition**
A1	Odours or airborne contaminants must not cause **environmental nuisance** to any **sensitive place** or **commercial place**.
A2	Dust and particulate matter emissions must not exceed the following concentrations at any **sensitive place** or **commercial place**: a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10.1 (or more recent editions), or b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 50 micrograms per cubic metre over a 24 hour averaging time, when monitored in accordance with Australian Standard AS 3580.9.3 (or more recent editions) or any other method approved by the **administering authority.**
Agency interest: Water	
Condition number	**Condition**
WT1	Contaminants must not be released to any **waters**.
Agency interest: Noise	
Condition number	**Condition**
N1	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place.**

<table>
<tr><td>N2</td><td>Noise from the activity must not exceed the levels identified in Table 1—Noise limits when measured in accordance with the associated monitoring requirements.

Table 1—Noise limits
<table>
<tr><th rowspan="2">Noise level dB(A) measured as</th><th colspan="3">Monday to Saturday</th><th colspan="3">Sunday and Public holidays</th></tr>
<tr><th>7am–6pm</th><th>6pm–10pm</th><th>10pm–7am</th><th>9am–6pm</th><th>6pm–10pm</th><th>10pm–9am</th></tr>
<tr><td></td><td colspan="6">Noise measured at a 'Noise sensitive place'</td></tr>
<tr><td>$L_{A10, adj}$, 10 mins</td><td>45</td><td>40</td><td>30</td><td>45</td><td>40</td><td>30</td></tr>
<tr><td>$L_{A1, adj}$, 10 mins</td><td>50</td><td>45</td><td>35</td><td>50</td><td>45</td><td>35</td></tr>
<tr><td></td><td colspan="6">Noise measured at a 'Commercial place'</td></tr>
<tr><td>$L_{A10, adj}$, 10 mins</td><td>50</td><td>45</td><td>35</td><td>50</td><td>45</td><td>35</td></tr>
<tr><td>$L_{A1, adj}$, 10 mins</td><td>55</td><td>50</td><td>40</td><td>55</td><td>50</td><td>40</td></tr>
</table>
Associated monitoring requirements

1. All monitoring devices must be correctly calibrated and maintained.
2. Any monitoring must be in accordance with the most recent version of the administering authority's Noise Measurement Manual.
3. Any monitoring of noise emissions from the activity must be undertaken when the activity is in operation.</td></tr>
<tr><td>N3</td><td>When required by the administering authority, noise monitoring must be undertaken in accordance with the associated monitoring requirements of Table 1—Noise Limits, and the results notified within 14 days to the administering authority. Monitoring must include:

1. $L_{A10, adj}$, 10 mins
2. $L_{A1, adj}$, 10 mins
3. $MaxL_{pA,T}$
4. the level and frequency of occurrence of any impulsive or tonal noise
5. atmospheric conditions including wind speed and direction
6. effects due to extraneous factors such as traffic noise
7. location, date and time of recording.</td></tr>
<tr><td colspan="2">Agency interest: Land</td></tr>
<tr><td>Condition number</td><td>Condition</td></tr>
<tr><td>L1</td><td>Contaminants must not be released to land.</td></tr>
<tr><td colspan="2">Agency interest: Waste</td></tr>
<tr><td>Condition number</td><td>Condition</td></tr>
<tr><td>W1</td><td>All waste generated in carrying out the activity must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.</td></tr>
</table>

Part 2 – Conditions relevant to Xanthate/Metham Plant and Copper Sulphate Plant (formerly permit number IPDE01182308)

Agency interest: Air

Condition number	Condition
A3	**The release of contaminant to the atmosphere.** The release of contaminants to the atmosphere from a point source must only occur from those release points identified in Table 2 – Contaminant release limits to air and must be directed vertically upwards without any impedance or hindrance. **Table 2 – Contaminant release limits to air** Release point number / Minimum release height (metres) / Contaminant release / Maximum release limit / Sampling frequency A1[1] (outlet of stack with 50mm diameter and vertical dimension of 9 metres) / 9 / Carbon disulphide / 1500 parts per million / Monthly A1[1] (outlet of stack with 50mm diameter and vertical dimension of 9 metres) / 9 / Carbon disulphide / 700 parts per million (85th percentile) / Monthly [1]A1 stack at xanthate/metham plant
A4	Contaminants must be released to the atmosphere from a release point at a height not less than the corresponding height stated for that release point in *Table 2 – Contaminant release limits to air.*
A5	Contaminants must not be released to the atmosphere from a release point at a mass emission rate/concentration, as measured at a monitoring point, in excess of that stated in *Table 2 – Contaminant release limits to air.*
A6	Contaminants must be monitored not less frequently than specified in *Table 2 – Contaminant release limits to air.*
A7	Monitoring of any releases to the atmosphere required by a condition of this approval must be carried out in accordance with the following requirements: a) Monitoring provisions for the release points listed in *Table 2 – Contaminant release limits to air* must comply with the Australian Standard AS 4323.1 – 1995 '*Stationary source emissions Method 1: Selection of sampling positions*' (or more recent editions). b) The following tests must be performed for each required determination specified in Table 2 – Contaminant release limits to air: i. gas velocity and volume flow rate; ii. temperature; iii. water vapour concentration (moisture content). c) Where practicable, samples must be taken when emissions are expected to be at maximum rates. d) During the sampling period the following additional information must be gathered: i. production rate at the time of sampling ii. raw materials used; iii. number of equipment and mixing vessels operating; iv. operating or mixing temperature; v. product made; and vi. reference to the actual test methods and accuracy of the methods.

Part 3 – Conditions relevant to Isotainer storage facility and sodium hydrosulphide dissolving plant (formerly permit number SPCE03305511)

Agency interest: General	
Condition number	**Condition**
G9	**Scope of activity** This approval authorises an isotainer storage facility (maximum storage capacity of 32 isotainers), sodium hydrosulphide dissolving plant design capacity of 80m³ per day of 20% sodium hydrosulphide solution, and a sodium hydrosulphide storage shed.
Agency interest: Air	
Condition number	**Condition**
A8	**Point source air emissions** The release of contaminants to the atmosphere from a point source must only occur from those release points specified in *Table 3 – Contaminant release limits to air* and must be directed vertically upwards without any impedance or hindrance. **Table 3 – Contaminant release limits to air**

Release point number	Minimum release height (metres)	Minimum release velocity (m/sec)	Contaminant parameter	Maximum release limit	Sampling frequency
A1 - NaHS[1] plant process building wet scrubber vent	15	5	Hydrogen sulphide	1parts per million	Continuous
A2 - NaHS[1] plant loading gantry wet scrubber vent	7.8	Not applicable	Hydrogen sulphide	1 parts per million	Continuous

[1]NaHS – Sodium hydrosulphide

A9	Contaminants must be released to the atmosphere from a release point at a height and a flow rate not less than the corresponding height and velocity stated for that release point in *Table 3 – Contaminant release limits to air.*
A10	Contaminants must not be released to the atmosphere from a release point at a mass emission rate/concentration, as measured at a monitoring point, in excess of that stated in *Table 3 – Contaminant release limits to air*, and monitored not less frequently than specified in *Table 3 – Contaminant release limits to air.*
A11	**Wet scrubber system** All effluent gases, dust and vapours discharged to the atmosphere via release points A1 and A2, as specified in *Table 3 – Contaminant release limits to air*, must be treated in a wet scrubber system prior to release.
A12	A backup wet scrubber liquor motor and critical pump parts must be kept on site for the transfer of scrubbing water to and from the scrubber systems.

A13	Adequate automated interlocks must be fitted in the scrubber liquid pump circuit for the sodium hydrosulphide dissolving plant and loading gantry to ensure operations are stopped if liquid flow failure in a circuit is detected.
A14	Monitoring and keeping of **records** of parameters that demonstrate compliance with *Table 3 – Contaminant release limits to air*. **Records** must be marked to show the true calendar date and time of day. Where monitoring indicates impaired operational performance likely to cause non-compliance, standby systems or corrective **measures** are to operate or else safe shut down of the processing plant must be carried out.
A15	If monitoring indicates that **environmental nuisance** is caused or threatened by odour release from the activities, then the registered operator must: (a) advise the **administering authority** of planned odour abatement **measures**; and (b) as soon as practicable implement odour abatement **measures** such that the release of odour from the **activity** will not result in further **environmental nuisance**.

Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment and Heritage Protection or its successors or predecessors.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Environmental nuisance as defined in Chapter 1 of the *Environmental Protection Act 1994*.

Land does not include **waters**.
Measures have the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.
Records include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.
Secondary containment system means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to land, groundwater, or surface waters.
Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
6. a public thoroughfare, park or garden; or
7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

Waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

END OF PERMIT