## **Annual Audit Compliance Report Form**

Environmental Protection Act 1986, Part V Division 3

Once completed, please submit this form either via email to <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>, or to the below postal address:

Department of Water and Environmental Regulation Locked Bag 10 Joondalup DC WA 6919

Section A – Licence details			
Licence number:	L5089/1989/9	Licence file number:	2010/004609
Licence holder name:	Kwinana Chlor Alkali Pty. Ltd.		
Trading as:	Kwinana Chlor Alkali Pty. Ltd.		
ACN:	130 483 395		
Registered business address:	Pt Lot 22 on Diagram 88339 Mason Road (Tronox Site), Kwinana Beach, WA, 6167		
Reporting period:	01/05/2023 <b>to</b>	30/04/2024	

## Section B - Statement of compliance with licence conditions

Did you comply with all of your licence conditions during the reporting period? (please tick the appropriate box)

- ☐ Yes please complete:
  - section C;
  - section D (if required); and
  - sign the declaration in Section F.
- $\boxtimes$  No please complete:
  - section C;
  - section D (if required);
  - section E; and
  - sign the declaration in Section F.

#### Section C – Statement of actual production

Provide the actual production quantity for this reporting period. Supporting documentation is to be attached.

Prescribed premises category	Actual production quantity	
Category 31 – Chemical Manufacturing	Chlorine 29,858mt – Caustic 34,839mt	

# Section D - Statement of actual Part 2 waste discharge quantity

Provide the actual Part 2 waste discharge quantity for this reporting period. Supporting documentation is to be attached.

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Prescribed premises category	Actual Part 2 waste discharge quantity	

#### Section E – Details of non-compliance with licence condition

Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.

Condition no:	Unauthorised discharge	Date(s) of non- compliance:	11/06/2023
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#### Details of non-compliance:

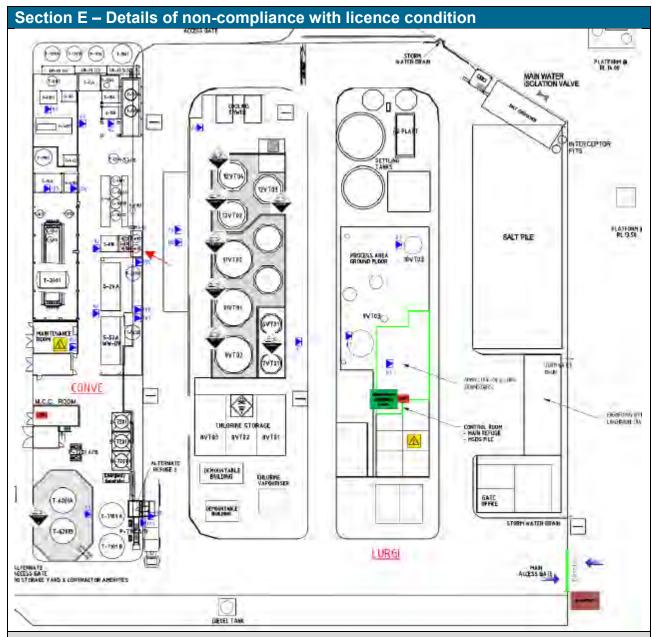
- On Sunday 11/06/2023 at 9 a.m. KCA lost power to the Conve plant and all drives in the field
- This resulted in Conve plant trip which stopped chlorine production immediately
- All chlorine in the pipework was purged to the scrubber unit however the scrubber pump was off due to power failure
- The backup scrubber pump (powered by Nitrogen) kicked in and started circulation of caustic liquor through the scrubber column immediately
- Given reduced flow (provided by the backup nitrogen pump) through the scrubber column, intermittent chlorine release from the stack occurred
- No onsite or offsite impact reported upon the minor chlorine release
- At the same time, fire alarm in the Conve MCC room was activated
- E&I technician was onsite for other jobs who went to the MCC room and started fault finding straightaway
- Upon investigation they found that there was an arc flash event in the cubicle for P-1802 (Conve dechlorination pump) which resulted in losing control power to the MCC and ultimately loss of mains power <u>from</u> the MCC to all field drives
- Mains power <u>to</u> the MCC was not affected therefore there wasn't any permissive for the Conve backup Diesel generator to kick in
- E&I technician managed to reinstate the control power supply to the MCC and operations team could restart all drives
- The period between losing and restoring power supply to the MCC was less than 10 minutes
- Conve plant left off for further investigations and in preparation for planned shutdown on Monday 12<sup>th</sup> June

What was the actual (or suspected) environmental impact of the non-compliance?

**NOTE** – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.

No discernible environmental impact and chlorine release dispersed onsite.

In the photo below, the Red arrow shows the location of the Conve stack.



#### Cause (or suspected cause) of non-compliance:

- The root cause of the incident is attributed to a hot joint on the contactor termination in the MCC cell, ultimately leading to a breakdown of insulation and arc forming between phases
- This fault caused an arc flash event whereby an electrical explosion occurs creating a cloud of toxic gasses, molten metal, pressure waves and extreme heat
- During the arc flash event large amounts of energy was released causing electrical protection devices to operate, tripping multiple circuit breakers including the overall control power supply

# Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:

- Damaged MCC module was repaired/rebuilt
- Thermographic inspection of all Conve MCC modules was completed by 3rd party contractor
- 7 extra hot joints found and repaired
- Thermographic inspection PM was created for all MCC modules at Conve and Lurgi plants

# Department of Water and Environmental Regulation

Section E – Details of non-compliance with licence condition				
Was this non-compliance previously reported to DWER?				
⊠ Yes, and				
⊠ Reported to DWER verbally	Date: 12/06/2023			
□ Reported to DWER in writing	Date: 15/06/2023			

## **Section F – Declaration**

I / We declare that the information in this Annual Audit Compliance Report is true and correct and is not false or misleading in a material particular<sup>1</sup>.

I / We consent to the Annual Audit Compliance Report being published on the Department of Water and Environmental Regulation's (DWER) website.

Signature <sup>2</sup> :		Signature:	
Name: (printed)		Name: (printed)	
Position:	CEO & Managing Director	Position:	Company Secretary
Date:	18th June 2024	Date:	18th June 2024
Seal (if signing under seal):			

<sup>&</sup>lt;sup>1</sup> It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular.

<sup>&</sup>lt;sup>2</sup> AACRs can only be signed by the licence holder or an authorised person with the legal authority to sign on behalf of the licence holder.