

## NSW Health Approved Form 3 Report

<b>Location:</b>	CLINGCAST METALS	<b>System name:</b>	BAC
<b>Client:</b>	CLINGCAST METALS PTY LTD		
<b>Client No:</b>	N14779	<b>Month:</b>	July 2022
<b>Contract:</b>	NC10691		

### Site and Contact Details

Provide the name, phone numbers (business hours, after hours and mobile numbers) email address and postal address for each of the contact person listed below.

Record	Details	
Site Address	98 BATH ROAD, KIRRAWEE, NSW, 2322	
Cooling water system details (number of cooling towers and unique identification number for each cooling tower)	<b>Number of cooling towers</b>	<b>UID</b>
	1	● SSC-HLT832583-0026-01
Local government authority (where this system is located)	Sutherland Shire Council	
Occupier name and contact details (the person or entity who owns the system)	Name: Paul L Clingan Email Address: Paul@clingcast.com.au Phone: 02 9521 1382 Phone Type: BUS DIR Address: PO Box 531, NSW, 1499	
<b>Duly qualified person</b>		
Duly qualified person name (the person who attended the site during this month)	LIAM WHITE	
Employer and contact details (the person or entity who operates or maintain the system)	HydroChem Address: 12/71A Milperra Road, Revesby NSW 2212 Tel: (02) 9792 1444 Email: nsw@hydrochem.com.au	

### Period covered by this monthly report

Record	Details
Period being reported (calendar month)	July
Period covered by current RMP (up to 5 year period)	20 Jul 2021 TO 30 Jun 2022
Date(s) of inspection(s) carried out this month	<ul style="list-style-type: none"> <li>05 Jul 2022</li> </ul>

### Microbial testing- in accordance with section 3.2 and 3.3 of AS/NZS 3666.3:2011

Record	Details	Date(s) sampled
Legionella Count	0	05 Jul 2022
HCC Count	1000	05 Jul 2022

### Chemical analysis- in accordance with section 3.4 and 3.5 of AS/NZS 3666.3:2011

Record	Details		Date(s) tested
Conductivity/TDS	800 (Min= 500.0 Max= 1500.0)		05 Jul 2022
pH	8.0 (Min= 7.0 Max= 8.2)		05 Jul 2022
TAH	3 (Min= 0.4 Max= 1.0)		05 Jul 2022
Other criteria necessary for effective management of corrosion, scaling, fouling and microbial growth	Inhibitor	200 (Min= 200.0 Max= 400.0)	05 Jul 2022
	Chloride	350 (Min= 200.0 Max= 500.0)	05 Jul 2022
	M Alkalinity	120 (Min= 20.0 Max= 300.0)	05 Jul 2022
Temperature (measured at the return line)	offline		05 Jul 2022

### Inspection and other checks- in accordance with section 3.4 and 3.5 of AS/NZS 3666.3:2011

Record	Details	Date(s) reviewed
Physical condition of the system	satisfactory	05 Jul 2022
Operation of the bleed control system	operational	05 Jul 2022
Operation of the make-up water system (including chemical dosing and control system)	operational	05 Jul 2022
Cycles of concentration	8	05 Jul 2022

Corrosion rate (involving monthly visual assessment and/or quarterly laboratory testing, as required by RMP)	none visible					05 Jul 2022	
	Coupon Type	Date In	Weight In	Date Out	Weight Out	Corrosion Rate (mpy)	
	NA	NA	NA	NA	NA	NA	

**Inspection and other checks- in accordance with section 3.4 and 3.5 of AS/NZS 3666.3:2011**

Record	Details	Date(s) reviewed
Adequacy of scale and corrosion inhibition	200 (Min= 200.0 Max= 400.0 )	05 Jul 2022
Cleanliness of wet surfaces (visibly free from accumulation of sludge, foam, slime, rust, scale, dirt and larger mineral or organic deposits)	satisfactory	05 Jul 2022
Date of most recent cleaning (in accordance with the RMP)		15 Jul 2022
Changes in the local environment (for example, local building demolition or construction, which should be recorded if noted during inspection)	no change	05 Jul 2022

**Remedial actions taken or recommended- in accordance with section 3.7 of AS/NZS 3666.3:2011**

Note any remedial actions taken or recommended by the duly qualified person during this month. Action may be taken in response to a significant change in the local environment, work practice or equipment. The duly qualified person can use this step to prompt the occupier to engage a competent person to take a preventative or corrective actions, corrective actions, and potentially undertake a new risk assessment and RMP.

List of remedial action taken or recommended this month.		
no action required		Action Taken

Attach documents and photographs to support the monthly report after this page.

The Regulation require certain result and records to be kept on the premises and made available immediately, or kept electronically and made available within 4 hours of request. These include operating and maintenance manuals; RMPs; results of microbial and testing and chemical analysis; and maintenance records (in accordance with section 3, 7 of AS/NZS 3666.3:2011).

### Details of person completing the form

Name of person completing the form	Contact details (phone number, email, postal address)
LIAM WHITE	(02) 9792 1444

Signature of person completing the form	Date
LIAM WHITE	18 Aug 2022

Role of person completing the form	Employer (name of company or organization)
Services Engineer	HydroChem

**CLINGCAST METALS PTY LTD**
**CLINGCAST METALS**
**July 2022**

 This report summarises all Legionella and HCC results for **CLINGCAST METALS** for **July 2022**
**1. BAC**

Legionella Species Report:

Date	Service Call ID	Result (CFU/mL)	Acceptable
05 Jul 2022	2207-1585	0	YES

**1. BAC**

Heterotrophic Colony Count Report:

Date	Service Call ID	Result (CFU/mL)	Acceptable
05 Jul 2022	2207-1585	1000	YES

## 2. WHAT DO MY RESULTS MEAN?

### Legionella Species Report:

A zero result indicates less than 10 organisms per 1 millilitre (AS/NZS 3896). Results were estimated after an incubation period of 7 days at 36C+/-1C. Sampled using procedures certified to ISO 9001 (Reg No 6465). Analyses carried out using procedures to AS3896. All samples were tested by a NATA Registered Laboratory

### Heterotrophic Colony Count Report:

HCC Result is useful in assessing the efficacy of biocidal treatment and state of microbiological control of organisms in the system. It is not a measurement of Legionella and does not reflect the physical condition of the cooling water.

Results are reported as colony forming units in 1 millilitre of sample. Samples incubated for 48 hours at 36C+/-1C as per AS4276.3.1/2. All samples were tested by a NATA Registered Laboratory

### Contact Us

At HydroChem we're recognised as the clear market leader in Australia's water treatment industry. Our mission is simple: to bring world-class water treatment products and services to clients across Australia. Please contact your account manager for any queries.

# Cooling Tower Cleaning Report



**Location:** CLINGCAST METALS  
**Client:** CLINGCAST METALS PTY LTD  
**Attention:** PAUL\*      **Technician:** NICK VASILESKI  
**Date:** 15/07/2022      **Service Call:** 2207-1584  
**Client No:** N14779      **Issued By:** SYDN  
**Contract:** NC10691      **Contact No:** 02 9792 1444

### Risk Assessment

If risk identified, refer to JSEA for details (√ = pass, X = fail)

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Safe access (falls, slips, trips)? | <input checked="" type="checkbox"/> Acceptable noise level with use of PPE? |
| <input checked="" type="checkbox"/> Safe manual handling?              | <input checked="" type="checkbox"/> Shutdown procedure?                     |
| <input checked="" type="checkbox"/> Adequate lighting?                 | <input checked="" type="checkbox"/> Other (refer JSA)                       |

## Results

BAC CT  
(SSC-HLT832583-0026-01)

### Tower Inspection Before Clean

Visible Condition

Mildly dirty.

### Cleaning Maintenance Procedure

#### 1. Start:

- Measures in relation to safety have been observed
- Isolated plant and dosing equipment

#### 2. Disinfect:

- Adjust pH to between 7 - 7.6 and maintain for 1 hour
- Add chlorinated detergent Hydro 464 and Hydro 360
- Circulate for one hour and keep free chlorine concentration above 10 ppm.
- Neutralise chlorine where necessary

#### 3. Clean:

- Drain cooling tower
- Remove drift eliminators. If not, why? (see comments)
- Clean drift eliminators
- Manually scrub high pressure water clean any safely accessible internal sludge, slime and dirt
- Remove residual water and sludge from the tower basin using wet vac.

#### 4. Re-disinfect:

- Refill cooling tower with water
- Adjust pH to between 7 - 7.6 and maintain for 1 hour
- Add Hydro 360
- Circulate for one hour and keep free chlorine concentration above 10 ppm.

#### 5. Recommission System:

- Add inhibitor, biocide and neutralise chlorine where necessary
- Restart plant as per checklist
- Check pH and inhibitor concentration

### Initial disinfection

pH at 30 minutes

Free chlorine at 30 mins

### Second disinfection

pH at 30 minutes

Free chlorine at 30 mins

### Final readings

pH

Inhibitor

### Plant Restart Check List

- REPLACED tower strainer
- SHUT drain valves
- OPEN make-up water valves
- REPLACED splash eliminators
- OPEN suction return valves
- OPEN balance line
- SHUT quick fill valves
- Tower fan ON
- Circulating pump ON
- Ball valve and water level satisfactory
- Chiller ON/RESET
- Hatches checked for leaks
- Water treatment re-instated
- Floor clear of spillage & clean

## Comments

CLEANS: Cooling tower cleaned in accordance with the above procedure. added 1l h360.

## Site Signature

*N/A*



# Water Treatment Service Report

**Location:** CLINGCAST METALS  
**Client:** CLINGCAST METALS PTY LTD  
**Attention:** PAUL\* **Technician:** LIAM WHITE  
**Date:** 5/07/2022 **Service Call:** 2207-1585  
**Client No:** N14779 **Issued By:** SYDN  
**Contract:** NC10691 **Contact No:** 02 9792 1444

### Risk Assessment

If risk identified, refer to JSEA for details (√ = pass, X = fail)

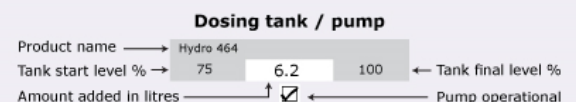
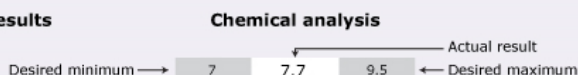
<input checked="" type="checkbox"/> Safe access (falls, slips, trips)?	<input checked="" type="checkbox"/> Acceptable noise level with use of PPE?
<input checked="" type="checkbox"/> Safe manual handling?	<input checked="" type="checkbox"/> Shutdown procedure?
<input checked="" type="checkbox"/> Adequate lighting?	<input checked="" type="checkbox"/> Other (refer JSA)

## Results

BAC CT (SSC-HLT832583-0026-01)			
<b>Analysis</b>			
pH	7	8.0	8.2
M Alkalinity (CaCO3)	20	120	300
Chloride (CaCO3)	200	350	500
TDS (CaCO3)	500	800	1500
Inhibitor	Hydro 260		
	200	200	400
Free Available Halogen	Hydro 360		
	0.4	3	1
<b>Inhibitor adjustments</b>			
Adjustment (L / Kg)	Hydro 260		
Adjustment (L / Kg)	Hydro		
<b>Inhibitor pump</b>			
Start% / Added / Finish%	Hydro 260		
	50		50
Operational	<input checked="" type="checkbox"/>		
<b>Biocide adjustments</b>			
Adjustment (L / Kg)	Hydro 360		
Adjustment (L / Kg)	Hydro 256		
	0.3		
<b>Biocide pump 1</b>			
Start% / Added / Finish%	Hydro 360		
	40	5	70
Operational	<input checked="" type="checkbox"/>		
<b>Biocide pump 2</b>			
Start% / Added / Finish%	Hydro 256		
	30	5	70
Operational	<input checked="" type="checkbox"/>		
<b>Other tests</b>			
Cycles	8		
ORP set point (mV)			
<b>Water Meter Reading</b>			
Make up Reading			
Bleed Reading			
<b>Samples</b>			
Heterotrophic Colony Count	<input checked="" type="checkbox"/>		
Legionella	<input checked="" type="checkbox"/>		
<b>Cooling tower inspection</b>			
Visible condition	Satisfactory.		

### How to interpret the results

All results in mg/L unless indicated otherwise



## Comments

CTS: Oxidising biocide residual was outside desired limits. All other residuals are satisfactory. Adjustment was made to correct levels. Chemical stock levels replenished as required. HCC Leg sample taken. Cooling tower drains flushed. Online disinfection carried out for bacterial control.

## Site Signature