

OCTOBER 2024 Volume 67 Issue 9. Online: www.corrosion.com.au

ACA NZ PRESIDENT'S INVITATION TO ASSET OWNERS

In September Maree Tetlow, CEO of ACA, visited the NZ Branch in person.

Maree and NZ President Grant Chamberlain discussed how to encourage asset owners to get back into the ACA, and his comments follow.

We currently have applicators talking to other applicators, and paint representatives talking to other paint reps and we discussed ideas for getting asset owners back to the ACA. We know we have great conferences, and our members have a wealth of knowledge, but how do we facilitate the dissemination of this information to the asset owners? We know that if we concentrate on getting the asset owner to attend the conference and technical meetings, the applicators and product salespeople would follow.

Maree proposed a scheme (see attached flyer) whereby ACA members can offer a free ticket to the Monday evening Hall opening and cocktail party. The Tuesday whole-day events are free, starting with the Plenary session.

The theme of the Asset Owners Session is Challenges and Innovation in Corrosion Mitigation in Capital Projects and Durability Maintenance of Assets (see pages 6-7)

Asset owners can visit the booths at any point and attend any of the sessions, with some specifically designed for them.

There's even a session devoted to asset owners giving feedback to the ACA about what topics they would like discussed. This interactive element ensures that their

voices are heard and their needs are met. Additionally, there is an option in the afternoon to visit the Large Ship Building and Maintenance facility in Cairns, further enhancing the hands-on experience.

I would encourage you to circulate this offer (i.e. the flyer) to your clients whom you think would find this valuable. This scheme not only provides them with a unique learning opportunity, but also serves as a potential relationship-building platform. They would need someone to help them make the most of the conference, and this could be the start of a fruitful partnership.

Maree visited Auckland, New Plymouth, Wellington and Christchurch and caught up with the more senior members of the various ACA committees. This gave NZ members a chance to express their opinions directly to Maree, which helped the NZ members feel more connected with the Australian head office.

Grant Chamberlain



L-R: Trish Shaw, Maree Tetlow, Nick Marston and Willie Mandeno during a visit to BRANZ Wellington

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NEW ZEALAND'S "ORANGE RIVER"

The source of Ohinemuri River's bright orange water has been confirmed, throwing the spotlight on mining's long-term impact on the environment.

Late in August 2024 the Ohinemuri River that passes through the Karangahake Gorge near Waihi township, an old gold mining centre, turned bright orange during a strong storm.

The orange river water immediately caused alarm amongst local residents, and authorities advised people not to touch or drink any of the contaminated river water. The Waikato Regional Council promptly sent samples of the orange river water for analysis and an investigation proceeded at haste.

The orange discolouration, which appeared to enter the river from a tributary, was traced back to a mineshaft where bright orange sludge was pouring from the old mining asset in the hills above the Karangahake Gorge. The old mineshaft was identified as being from the Comstock mine, which dated back to 1896 and which was never commercially operated. The orange sediment was visible in the river for some time after the heavy rain event, but it eventually flushed away.

The Waikato Regional Council concluded there was "no clear evidence of culpability other than it being the result from mining activities more than 100 years ago."

The water analysis results that had come back showed the orange sediment comprised high iron content (likely rust), traces of copper, zinc and arsenic, but no mercury or cyanide.

It is known that iron bacteria "feed" on iron in water. The dissolved iron, from rusting old iron-steel mining plant, reacts with oxygen in the air and forms rust-coloured iron oxide which likely produced the orange coloured water. This orange river water event emphasises the ongoing likelihood of the long-term impact of mining during the 19th century on the environment.



Top left: The orange Ohinemuri river.
© Heather Keats

Left: Sampling the river water for analysis

Below: The origin of the contamination was from an old mineshaft



Q & A CORNER



Older ACA NZ members have probably seen a number of situations that may never have made it to a textbook.

If you have a question you'd like clarification on, email it to the Editor at lesboultonrust@gmail.com. We'll pose it to our panel of experts who will answer it in another Bulletin, so everyone can improve their knowledge.

Q:
How do you identify the ultimate cause of a corrosion-related failure?

& A:

A typical failure analysis usually provides the failure mechanism which can be used to determine the definitive cause(s) of the failure, so that future occurrences can be prevented. This latter phase is referred to as the root cause analysis (RCA) and such a determination is critical for any corrosion-related failure.

Although an RCA starts with a thorough failure analysis, another major component may include establishing a cross-functional team with an organised procedure and assigned tasks for the team members.

The team functions would be to assess (1) the ultimate cause of the failure; (2) identify any underlying conditions that led to the failure; (3) recommend corrective actions that may include process or design changes; (4) additional maintenance requirements; (5) improved training of operators; (6) recommend metallurgy upgrades at specific locations.

At the conclusion of the RCA, the team must summarise the underlying causes and their relative contributions and identify system problems that need to be addressed for the path forward. Such system problems may include process, component, and human factors, as well as a combination of these.

The underlying causes identified during an RCA may result in legal proceedings that sometimes follow a corrosion failure where human factors were a major contributor to the cause of the failure.



The sudden catastrophic corrosion-related failure of this steel salt bin resulted in the death of the truck driver.

2024 Wellington Schools Science Fair

From the 255 projects entered from schools in the Wellington Region in the NIWA Science and Technology Fair, there was only one related to material durability or corrosion prevention. This was 'Rust in Time' submitted by Chris Gray and Loukas Winiata who are Year 10 students at Rongotai College. Their project investigated the efficiency of three coatings (CRC Rust Guard, CRC Rust Converter and Linseed Oil) to protect aluminium, zinc and steel immersed in a sodium hydroxide solution (while suspended on copper wire!)

They were judged worthy of a \$100 cash prize, from the ACA NZ Branch for their efforts. The balance of our prize money, ie \$200, will be carried over for the 2025 Awards.

submitted by Willie Mandeno



TRAINING OPPORTUNITIES IN NEW ZEALAND

CP1 | NZ | 14-18 Oct 2024 Level 1 Tester

This course is the first of AMPP's Cathodic Protection series, covering both theoretical and practical CP techniques. For more details and to register, go to: <https://events.blackthorn.io/en/5j1hxgo7/g/3VggT5Fffm/ampp-cathodic-protection-level-1-tester-or-nz-or-14-18-oct-2024-4a2ZI7235y/overview>

CP2 | NZ | 21-25 Oct 2024 Level 2 Technician

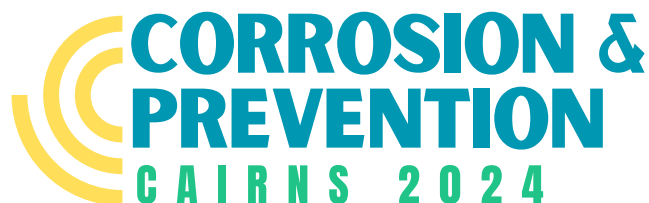
This certification indicates intermediate-level knowledge of corrosion theory and CP concepts, types of CP systems, and advanced field measurement techniques. For more details and to register, go to: <https://events.blackthorn.io/en/5j1hxgo7/g/3VggT5Fffm/ampp-cathodic-protection-level-2-technician-or-nz-or-21-25-oct-2024-4a2ZI7236D/overview>

CSS | NZST | 21-23 Oct 2024

This course addresses the guidelines for writing paint coating specifications that are fit for purpose. For more details and to register, go to: <https://events.blackthorn.io/en/5j1hxgo7/g/3VggT5Fffm/aca-coating-selection-and-specification-or-nzst-or-21-23-oct-2024-4a2ZI7236S/overviewACA>

CTC | NZ | 25-29 Nov 2024

This is a great foundation course for all corrosion professionals. For more details and to register, go to: <https://events.blackthorn.io/en/5j1hxgo7/g/3VggT5Fffm/aca-corrosion-technology-course-or-nz-or-25-29-nov-2024-4a2ZI71kFV/overview>



**NAVIGATING CORROSION
CHALLENGES IN
MARINE and COASTAL
ENVIRONMENTS**

10 – 14 November 2024

Join us at C&P 2024 as we navigate all things corrosion!

REGISTER NOW!

Visit <https://www.corrosion.com.au/conference/tickets/>

ICS has an “arsenal” of services

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ICS is a company that primarily provides coating inspections and consultancy services including third party inspections, condition assessments, specification and ITP writing, peer reviews, defect analysis inspections to all sectors of the industrial coatings industry, including residential/commercial buildings and intumescent coatings.

Training can be tailored to the needs of clients, and can be put together and delivered for applicators.

ICS concentrates significantly on coating aspects within the high voltage electricity sector, encompassing generation (hydro penstocks and dams, wind farm structures, thermal piping, gas facilities, etc.), and transmission including tower structures, substation gantries, transformers, etc.

To add to the arsenal of our services, we also carry out project management roles for minor construction and coating projects, work management roles within substation environments, electrical test and tag - and so much more.

ICS has one person with NACE Certified Coating Inspector – Level 3 / AMPP Senior Certified Coatings inspector, currently two with NACE Certified Coating Inspector – Level 2/AMPP Certified Coatings Inspector, and one with AMPP Basic Coatings Inspector certifications.

While we are domiciled in the Taranaki region, we work extensively and effectively throughout New Zealand.

If you are looking for anything coating related that we can help with, just ask.

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ACA NZ BRANCH COMMITTEE & OFFICERS 2024-25

President: Grant Chamberlain

Communications: Trish Shaw

Secretary: Mark Sigley

Membership: Trish Shaw

Treasurer: Willie Mandeno

Technical: Raed El Sarraf

Education: Matt Vercoe

Electrolysis: Grant Chamberlain

Members: Rene Hill (VP), Philip La Trobe, Nicholas Zglobis and Ry Collier

Editor: Les Boulton

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Asset Owner Sessions

The ACA is inviting you as a VIP asset owner to attend part or all of the 2024 conference in Cairns (10-14 November 2024). As a VIP Asset Owner we invite you to some complimentary sessions including the Confidential Asset Owner session and a special Asset Owners reception on Monday evening.

Asset Owner Specific Events

Monday 11 November –Evening

Asset Owners Welcome Reception

Evening: Exhibition Hall Opening and Welcome Asset Owners Cocktail Party sponsored by the AMPP Australia Chapter.

Tuesday 12 November

8.30 – 10.00am –Plenary Presentations

Complimentary Entry to the Plenary Sessions

1.PF Thompson Plenary (Prof Nick Birbilis an internationally acclaimed academic and corrosion professional. The presentation includes an entertaining science experiment).

2.Plenary Speaker (TBC)

11.20am – 1.30 pm Confidential Asset Owners Session

ACA and AMPP are jointly hosting our first formal Confidential Asset Owners Session in Australia. This follows other similar forums held international that have been proven to be very successful and appreciated by those in attendance.

Theme:

"Challenges and Innovation in Corrosion Mitigation in Capital Projects and Durability Maintenance of Assets."

Objective for Asset Owners: A safe space for Asset Owners to share information and gain valued advice from others that have dealt with similar challenges or situations.

Session includes:

- Exclusive to Asset Owners – Australia, New Zealand and Asia
- Two local asset owners are invited to present a case study on challenges and approaches they have taken, and what they have learned in an open sharing session.
- This is followed by an open dialogue session where all asset owners can discuss failures, near misses, problems, and tips to share amongst the group.
- This session will also include ACA and AMPP current services to asset owners, and request feedback on what other services need to be developed.

1.30pm – 2.15pm Networking Lunch sponsored by the ACA and AMPP

2.30pm-4.30 Tuesday Afternoon Session (**Two options available**)

Option 1 - Site Visit - Austal Ship Yard

Private site inspection of Austal Mobile Boat Hoist and shipbuilder. Austal is a global shipbuilder, and the Cairns facility services the Defence Force Patrol boats and other ships. This site inspection will review the methods that Austal use to service the maritime sector in the region, and methods they use to control corrosion and keep ships and the maritime sector serviceable.

Option 2 – Paper Sessions and Forums*

2.30pm – 5.00pm Papers and Forums

Complimentary entry to the following sessions*:

- Asset Management Papers
- Coatings Forum
- Concrete Forum
- Sustainability Forum
- Oil & Gas and Energy Forum

*please note the program is subject to change





Conference Theme:

Navigating Corrosion Challenges in Marine and Coastal Environments.

10 – 14 NOVEMBER 2024

Join us at C&P 2024 as we navigate all things corrosion.

10-13 November – Cairns Convention Centre (Main Conference)

14 November – Applicator Day (Cairns Ports Venue)

Asset Owner Related Program for Full Attendance at the Corrosion & Prevention Conference

The full details for the ACA Conference, including full registration and other options for Asset Owners is detailed as follows.*

Sunday 10 November

6.00pm – 9.00pm Welcome Reception

Monday 11 November – Asset Owner's Conference Program

9am – 5.50pm The first full day of conference has been designed with Asset Owners in mind. It includes international plenary speakers, followed by papers on: coatings, cathodic protection, marine, concrete and non-ferrous materials. The afternoon also includes the Water Forum, that also incorporates a Water Utilities Confidential Session*.

Tuesday 12 November - Asset Owners Confidential Session – Complimentary VIP's

7am Women in Corrosion Breakfast

9am – 5.50pm Please refer to previous page for a detailed outline (free access for Asset Owner VIPs)

6pm -11pm Awards Night Dinner

Wednesday 13 November – Conference Full Day

8:30am-9.30am NAVC Forum (TBC)

9.30 am – 10.30am Other Forums incl. Defence Forum

11.30 – 4.30pm - Plenary Sessions, and paper streams including coatings, research in-progress and steel.

Thursday 14 November - Applicator Day

9am – 11am – Site Tour

11.30am – 5pm Coatings-related technical talks, and applicator equipment demonstrations.

5.30pm – 8.30pm – Conference Wrap Party

To Provide an EOI to Attend the VIP Asset Owners Complimentary Sessions – please RSVP [here](#)

To buy a full registration or other conference tickets please review here:

<https://www.corrosion.com.au/conference/tickets/>

*please note the program is subject to change

