

AUSTRALASIAN CORROSION CONSULTANTS

QUALITY MANAGEMENT PLAN

2015

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1. INTRODUCTION

This document defines the quality management practices and processes Australasian Corrosion Consultants (ACC) will observe during all project, consulting and contracting works.

ACC applies quality assurance in delivering Services so as to effectively and efficiently satisfy the needs of its customers and clients.

This document must be read in conjunction with ACC's Quality Management Policy.

2. PRODUCT AND SERVICE REALISATION

2.1 DETERMINING CLIENT REQUIREMENTS AND EXPECTATIONS

The client's expectations and requirements are determined by cohesive planning and communication between ACC and the Client. Written communications are imperative to ensure clarity of Scope of Works (SOW). Non-generic works will be performed under either an Integrated Work Method System (IWMS), and/or an Inspection and Test Plan (ITP). These documents will be drafted for the specific project and submitted to the client for their records.

2.2 SERVICE PROVISION

Each project will be appointed a suitably competent Project Manager (PM). It is the PM's responsibility to clarify roles and responsibilities of the client, ACC staff, sub-contractors and other stakeholders. The PM will be accountable for the provision of sufficient man-power to provide the product and services required by the client.

2.3 PURCHASING

See section 6 below

2.4 DESIGN

Any design work for installation, submission or specification will be performed to relevant Australian Standards and be reviewed for Quality Assurance by a Principal Corrosion Technologist.

2.5 DOCUMENT CONTROL

Documents to be released for client submission will be reviewed by at least two (2) persons. This will include an initial technical and language review by a competent person and a final review and sign-off by the company director. No documents for client submission will be released without authorisation from the company director. Documents will be titled as per the standard company nomenclature as specified by ACC standard office procedure.

3. MEASURING AND TEST EQUIPMENT

ACC calibrate one digital multimeter and one decade box on an annual basis by a NATA certified calibration specialist. This is performed by sending the equipment to a NATA certified calibration specialist.

All equipment used for inspection, measuring and testing is annually checked against the calibrated instruments and maintained in good working order to ensure reliable performance and accurate results. Copper Sulfate Electrode (CSE) half cells are calibrated using ACC's standard methodology, other reference electrodes used will be calibrated against a known CSE reference.

The PM will select measuring equipment to suit the accuracy of the proposed application and only be used within its range of accuracy. When issuing measuring equipment for use, the PM will confirm that the equipment is in current calibration.

If an item of equipment is knocked or dropped or if out-of-calibration is suspected, the user will immediately check its calibration, where possible, by comparing measurement against a similar item. Alternatively, the user will promptly tag the item "NOT TO BE USED" and arrange for it to be recalibrated. Materials Lists are required to be updated when changes in calibration are noted.

If equipment is damaged, the user will immediately tag it "NOT TO BE USED" and notify the PM who will promptly arrange repairs.

The PM will arrange for the validity of measurements or tests that utilised defective equipment to be re-assessed.

4. INDUCTION AND TRAINING

All ACC operations staff will be company inducted and have, as a minimum, the following qualifications:

- Current Australian Driver's License (Manual)
- Occupational Health and Safety Induction Training (White Card)

ACC employees will not perform inspections or maintenance tasks unless competent to do so. Inspection competency includes being conversant with inspection procedures, safety, traffic control, environmental protection and incident management requirements. Works requiring task-specific qualifications will only be performed by suitably trained personnel (ie: ACA Accreditation, Relevant Tertiary Qualification)

The PM will ensure that all on site personnel engaged on the project (including subcontractor's personnel working under ACC's quality system) have undergone an appropriate induction programme which ensures they are aware of how the quality system is to be implemented on the project.

ACC will keep a training register of all employees.

OH&S and Environmental training is dealt with fully in ACC's Safety Management Policy and Environmental Management Policy respectively.

5. PURCHASING AND SUPPLY

ACC will ensure anything purchased or supplied, including subcontract Services, conforms to the contract and project specifications before incorporating it in any Service.

Purchases over \$500.00 require the use of a purchase order.

Materials and products supplied will be conforming and traceable and be sourced from a reputable and/or known supplier.

The PM is responsible for receipt of incoming goods used for the Services. This comprises checking that orders are complete, identified and undamaged, and also that any required documentation such as certificates of compliance and test results are submitted by the supplier.

The PM is responsible for reviewing all inspection and test documents submitted by the supplier for the incoming goods to verify that all quality requirements have been met. A record of this verification will be kept where necessary.

Any non-conforming products will be clearly labelled by and kept separate from conforming products pending a decision on their disposal. The PM will keep records of such actions in the company Non-conformance report.

6. SUPPLY OF MATERIALS

6.1 MATERIALS SCHEDULE

The PM is responsible for preparing a Materials List for all materials needed to carry out the Services. The Materials List will be included in the IWMS and it will show:

- Source(s) of supply if relevant,
- Anticipated quantities for use,
- Applicable specifications to be used for purchase,
- If supplier is to carry out tests, frequency of testing and
- If ACC is to carry out tests, applicable Test Plan.

6.2 MATERIALS SUPPLIED BY ACC

The PM will arrange any source testing and production testing of any materials to be supplied by ACC in accordance with the IWMS or ITP.

6.3 MATERIALS SUPPLIED BY THE CLIENT

The PM will take delivery and inspect the materials supplied by the Client where required.

ACC will carry out checks on any certificates to ensure the materials comply with the client specified quality requirements. ACC will keep written records of deliveries.

The PM will immediately advise the client representative in writing of any shortages, deficiencies or materials unsuitable for use.

7. HANDLING, STORAGE, PACKAGING AND DELIVERY

ACC recognises it is necessary to take care with handling, storage, packaging and delivery of goods and materials (where appropriate) to ensure that product quality is not impaired during these operations.

The PM is responsible for the provision of secure storage arrangements. The following general guidelines are to be observed:

- Store bulk materials such as aggregates, sands and topsoils on paved or firm cleared ground in separate stockpiles or bins to avoid mixing or contamination,
- Store anode material in a location where there is minimal risk of it being damaged by plant and vehicles. If required, store it under a waterproof shelter and supported clear of the ground,
- Store fuels, chemicals and explosives in accordance with regulatory requirements and hold applicable Material Safety Data Sheets (MSDS) in a readily accessible location on site,
- Store under shelter products that may degrade after becoming wet and
- Store other products as directed by the PM in accordance with handling and storage specifications.

The PM is responsible for periodically inspecting products with limited shelf life. If the shelf life has expired, the product will not be incorporated in the Works. Consignment notes from delivery are to be filed on Project File

The PM is responsible for handling operations and will ensure that products are handled carefully to avoid damage.

8. MONITORING SUBCONTRACTORS

ACC ensure that preferred contactors are selected based on past performance or nominated by the client. The PM will ensure that all personnel working under a sub-contract will be suitably qualified and inducted as per the requirements of the project.

No works will be performed for ACC, by a third party, who does not have written approval by the PM and an ACC purchase order.

Prior to ANY works being completed by a sub-contractor, their roles and responsibilities must be clearly defined in writing under the IWMS system and 'tool-boxed' while on site. The PM must ensure that all personnel working for or on behalf of ACC have signed the IWMS documentation.

All works performed for or on behalf of ACC will be directly supervised **AT ALL TIMES** by the Project Manager, or a nominated company representative.

9. CONTROL OF SUB-STANDARD SERVICES

9.1 EVALUATION

ACC employees are required to minimise substandard Services. However, ACC recognises they may occur from time to time within its own Services and those of its subcontractors.

The PM is responsible for evaluating substandard Services and deciding whether they are Minor Defects or Non-conformances.

Disposition	Description
Minor Defect	Service acceptable for Practical Completion but needing minor rework prior to full acceptance
Non-conformance	a deficiency in the Service which renders the product unacceptable in terms of the Client's specified requirements

The PM is responsible for restricting further processing of Non-conformances until a rectification method has been finalised.

9.2 MINOR DEFECTS

Minor defects which are a normal part of Services and which are rectified in the normal course of events need not be documented as non-conformances. The PM will keep a minor defects list in their site diary and noted on the companies task list. Each listed defect will be marked-off, initialled and dated after that defect has been satisfactorily rectified.

9.3 NON-CONFORMANCE IN PROJECT WORKS

When a non-conformance is detected by ACC personnel, it will be notified promptly to the PM who will then notify the Client Representative. If the Client notifies ACC of a non-conformance;

The PM will:

1. Immediately arrange for the non-conforming Works to be suitably identified by labels, flags, markers or other appropriate means to distinguish it from conforming Services or materials. Wherever possible, the non-conforming Services will be physically isolated.
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2. Immediately record the nature of the non-conformance in writing through the use of the ACC Non-conformance report.
3. Assess whether the process and/or equipment is likely to produce more non-conforming Services and whether further output should be restricted.
4. Consider the significance of the non-conformance and the progress of the project. Where appropriate, restrict works until an acceptable rectification method for the non-conformance has been resolved. Where safety or health is compromised by the non-conformance, the process or equipment will be stopped immediately and not used until the non-conformance report is closed-out by the PM and Client Representative.
5. Immediately determine the appropriate rectification method. This may be by rework, repair, replacement or use-as-is. Record the rectification method and when it will be undertaken.
6. Where the proposed rectification method involves a change from the Client's specifications, submit the rectification methodology in writing to the Client Representative. ACC will not commence rectifying the non-conformance without the concurrence of the Client representative.
7. Inspect or test the rework, repair or replacement in accordance with the Inspection and Test Plan or as otherwise agreed with the Client's representative to ensure that the required quality has been achieved.
8. Where required by the Client's Specifications, a HOLD POINT will apply prior to covering up rectification work. In such cases notify the Client representative when the rectification work has achieved conformance.

9.4 SUBCONTRACTOR NON-CONFORMANCES

For subcontractors working under ACC's management system, subcontractor non-conformances will be resolved as described above.

Where a subcontractor is working under its own quality management system, non-conformances will be recorded on the subcontractor's Non-conformance Report forms and the subcontractor will notify ACC's Project Manager. Regardless of the provisions of the subcontractor's system, where safety or health is compromised by the non-conformance, the process or equipment will be stopped immediately and not used until the non-conformance report is closed-out and signed-off by ACC's PM.

If the non-conformance rectification involves a change from the Client's specifications or if there is a possibility that other project Services could be affected:

- The PM's approval will be obtained and then
- The rectification method will be submitted for the Client's determination.

ACC will file a copy of the subcontractor's Non-conformance Report where ACC has been involved in resolving the non-conformance.

10. QUALITY RECORDS

The keeping of quality records is dealt with in accordance with client specifications, as well as the ITP and IWMS system. Quality records will be submitted to the client with all reports, as required.

11. REVIEWING THIS QMP

ACC will review the QMP to ensure it is appropriate and is being implemented effectively. Changes may arise from; a change of scope, Client audits or from opportunities for improvement. This Plan will then be updated

REPORT TYPE for Asset Owner
Asset

to reflect any changes which have occurred. The revised document will be reviewed and approved by the Company Director and all staff will be notified via Memorandum.
