

PAINTING CONTRACTOR CERTIFICATION PROGRAM **ACCREDITATION REQUIREMENTS – CLASS 30**

Editorial Note: This version of the document added pre-requisites for achieving this accreditation, formatting changes and updating of website references.

SCOPE

- This document establishes the accreditation requirements for contractors involved in the Coatings Protective Class Category Refurbishment of HVTT by cleaning and painting of structures using climbing with lanyards and/or ropebased access and wet abrasive blasting and high pressure water cleaning processes and application of protective coatings to galvanised steel and concrete.
- It needs to be noted that PCCP is a trademark registered with IP Australia and is owned by CSIRO and is protected by applicable laws. Unauthorised use is prohibited.

INTRODUCTION & BACKGROUND

- For details of the PCCP scheme, its history, management and operation, refer to PCCP Documents D001 to D004.
- For details on the various protective coatings accreditation Categories, Classes and Sub-classes refer to PCCP Document D007.
- High voltage transmission towers were built in large numbers following WW2 to supply the electricity demands of a growing economy and population.
- High Voltage Transmission Towers are typically steel structures of large dimensions - 10 m base and an elevation up to 60 m. Historically individual segments of these towers were hot dip galvanised for maximum durability then bolted together on site.
- Towers have also been constructed from painted steel and some will incorporate hazardous paints containing lead or chromium compounds.
- Currently aged 50+ years, they are now f) approaching the end of the effective service life with a large portion of the zinc protective coating having been eroded or weathered away.
- Refurbishment of HVTTs is a specialist task involving multiple personnel with very specific skills, experience, knowledge:
 - i. Specification shall be prepared by qualified staff with appropriate expertise in surface preparation specification formulation. The deep knowledge of products that will provide the desired service life and experience in the selection is required.
 - ii. Contractors with high level skills in delicate surface preparation where thin zinc layers are present, qualifications in rope access work and tower rescue, experience in the application of high-tech protective coating products.
- High voltage transmission towers have historically h) been:
 - Accessed by climbing using lanyard fall arresters and rope access.

- ii. Prepared using high pressure water techniques.
- iii. Painted using brushes.
- Long term durability can be provided using these techniques in conjunction with appropriate APAS certified paint products.
- Failure to engage the appropriate consultants and contractors can lead to the wasting of scarce maintenance funds on unskilled and inexperienced contractors, choice of an unsuitable product and little or no improvement in the extended service life of the HVTT.
- On the other hand, judicious selection of specification writer and painting contractor can provide an order of magnitude improvement in service life for minimal extra cost.

AUTHORITY & RESPONSIBILITY

The Executive Officer, PCCP (EO) is responsible for the content of the procedure and has the authority to implement the requirements of this procedure.

REFERENCED DOCUMENTS

This procedure refers to the following PCCP documents:

- i. Document PP-D001 How PCCP Operates.
- ii. Document PP-D003 Schedule of Fees
- iii. Document PP-D004 Complaint Handling
- iv. Document PP-D007 Categories and Classes Document PP-D008 Business Management System Criteria
- v. Document PP-D014 Management of Hazardous Coatings - Industrial Situations
- Form PP-F001 Initial Application for PCCP Accreditation
- vii. Form PP-F010 Extension Application for PCCP Accreditation
- viii. AS/NZS 1891: Industrial fall arrest systems and devices (series of standards)
- ix. AS/NZS 4361.1:2017 Guide to hazardous paint management - Lead and other hazardous metallic pigments in industrial applications

All PCCP documents and forms are available for downloading from the Documents section of the PCCP web site at: http://www.apas.gov.au/

Spray Painting and Powder Coating Code of Practice is available at:

https://www.safeworkaustralia.gov.au/doc/model-codepractice-spray-painting-and-powder-coating

Abrasive Blasting Code of Practice is available at: https://www.safeworkaustralia.gov.au/doc/model-codepractice-abrasive-blasting

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5. **DEFINITIONS & ACRONYMS**

5.1 Definitions

There are no terms requiring special definition.

5.2 Acronyms

ABN Australian Business Number
ACN Australian Company Number

CSIRO Commonwealth Scientific and Industrial

Research Organisation Executive Officer, PCCP

EO Executive Officer, PCCP
HVTT High Voltage Transmission Towers

ITP Inspection and Test Plan
KPI Key Performance Indicator
NCR Non-Conformance Report

PCCP Painting Contractor Certification Program

RPL Recognition of Prior Learning

SHREQ Safety Health, Regulatory, Environmental and

Quality (management systems)

SWMS Safe Work Method Statement

6. SUB-CLASSES

There are no sub-classes within this Class.

7. ACCREDITATION REQUIREMENTS

7.1 Pre-requisites

- Applicants shall already hold, or already be well on the way to receiving, PCCP accreditation for Protective coatings Class 3 and 4 Site Operations – refer PCCP Documents PP-F002 and PP-D013.
- b) In order to achieve Class 30, the Applicant must be able to provide evidence of compliance to all requirements documented in:
 - i. PP-D008 and
 - ii. Clause 7.2 below.

7.2. Management Requirements

- The Applicant needs to be able to demonstrate their ability exactly follow the painting specification and ITP prepared or approved by the asset owner.
- b) The Applicant needs to be able to demonstrate a client base and a history of successfully undertaking a range of jobs appropriate to the Class of accreditation sought.
- The Applicant also needs to be able to show that throughout the organisation, at all levels, there is a commitment to Quality principles, a desire to improve the business using those principles, and a knowledge of the organisation's position on quality. Senior management is expected to be intimately involved in the process via:
 - Regular management review of results (KPI, NCR, complaints) and trends.
 - ii. The provision of adequate resources (human, skills, equipment etc) to enable policies, goals & objectives to be achieved.

7.3 Specific Requirements - Class 30

7.3.1 Climbing and Rope Access

- a) All on-site personnel shall be accredited to CPCCCM2010A, RIIOHS204A or MNMG237A "Work Safely at Heights" as provided under the Vocational and Educational Training (VET) system, and delivered by Registered Training Organisations (RTO's).
- o) Where the work areas are accessed using ropes, all on-site personnel shall also be trained to a minimum of Level 1 of a recognised Industrial Rope Access Trade Association (IRATA) or Australian Rope Access Association (ARAA) Ropes Access Course, which meets the requirements of AS/NZS1891 Series of Standards.
- c) Where the work areas are accessed using climbing and/or ropes, at least one person shall be accredited to UETTDRRF05A "Perform Rescue from Switchyard Structures at Heights" or nationally recognised equivalent as provided under the Vocational and Educational Training (VET) system and delivered by Registered Training Organisations (RTO's). An accredited person shall be on-site at all times whilst work is being carried out at height.

7.3.2 Surface Preparation

- The painting specification shall be prepared by a competent coating inspector following a close and thorough inspection.
- The painting specification shall describe the current status of the structure, detailing any existing (organic) coatings and how much galvanising remains (if any).
- c) The painting specification shall detail the surface preparation process that is to be followed and will typically require wet abrasive blasting.
- d) The painting contractor shall be experienced in blending the right amounts of water and abrasive media to achieve a clean surface without removing all remaining galvanising.
- e) The ITP shall detail appropriate Hold and Witness points that will need to be signed off by the nominated inspector prior to proceeding.
- f) The equipment used for surface preparation shall prove capability in terms of removing zinc corrosion products, and delivering the required surface profile height, whilst removing less than 10 μm of sound remaining galvanizing. Records shall be maintained of such testing.
- g) The equipment used for surface preparation shall prove capability in terms of preparing corroded steel surfaces to the specified class of blast and surface profile height. Records shall be maintained of such testing.





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7.3.3 Personnel Competence

- a) All personnel nominated as blast cleaners shall be formally trained in terms of differentiating between substrate corrosion and selective leaching corrosion of weathered galvanizing and shall be tested for competency. Records shall be maintained of this training and assessment.
- b) All personnel nominated as blast cleaners shall be trained in the use of all surface preparation equipment and shall be tested for competency in terms of Comply with the requirements in the Abrasive Blasting Code of Practice. Records shall be maintained of this training and assessment.
- c) All personnel nominated as paint applicators shall be trained in the application of the approved paint, in accordance with manufacturer's written requirements, and shall be tested for competency. Records shall be maintained of this training and assessment.

7.3.4 Containment

All environmental management shall be in accordance with the client specified and any statutory requirements.

7.3.5 Lead Paint

Where existing paint contains lead at concentrations greater than 0.1%, the Contractor shall be accredited to PCCP Class 5, and the worksite shall be managed in accordance with the requirements of AS/NZS 4361.1.

7.3.6 Paint products

All paint products used on tower refurbishment shall be certified to APAS specifications.

8. ACCREDITATION PROCESS

The accreditation process is detailed in PCCP Document PP-D001 clause 9.





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9. TECHNICAL CAPABILITY

9.1 Inspection and Test Equipment (ITE) and Standards for Liquid Organic or Inorganic Coatings

	Class 30
Designation	30-1
Technical Library Requirement	Requirement
AS 1627 Parts 1 - 9 (inclusive)	M
AS 3894 Method 1 - 4 (inclusive)	M
AS 3894 Method 7, 10 - 12 (inclusive)	M
SSPC-VIS 5 / NACE VIS 9 Wet Abrasive Blast Cleaning	М
AS 1891 Industrial Safety Belts and Harnesses	М
AS 4488.1 Industrial Rope Access Systems – Specifications	М
AS 4488.2 Industrial Rope Access Systems – Selection, Use and Maintenance	М
ITE	
Abrasive Blast Visual STD	M
Flash rusting visual STD	M
Profile Height AS 3894.5 Method A	M
Surface Salt Meter (Hedon or equivalent)	M
Temperature - Surface	M
Temperature - Ambient	M
Whirling Psychrometer	M
Dew Point – Calculator	M
Wet Film Thickness Gauge	M
Dry Film Thickness 0-1250 μm	M
Set of Standards or Shims	M
Inspection Markers e.g. Chalk	M
Adhesion Tester	0
Masking Tape	M
Stanley Knife / Scalpel	M

Note 1: M = Mandatory that equipment is owned or can be hired/leased/borrowed. O = Optional.

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9.2 Surface Preparation Equipment for Liquid Organic or Inorganic Coatings

	Class 30
Designation	30-1
Equipment	Requirement
Compressor	
Brand / Type:	M
Capacity:	
Wet abrasive blasting equipment	M
High pressure water cleaning equipment (3,000 to 6,000 PSI)	М
Abrasive Handling Equipment	M
MBX Bristle Blaster	M
Waste Disposal Facility	M
Safety Clothing / Spectacles	M
First Aid / Eye Wash Bottles	M

9.3 Application Equipment for Liquid Organic or Inorganic Coatings

	Class 30
Designation	30-1
Equipment	Requirement
Bund for mixing and storing paint	M
Paint brushes	M

9.4 Licences and Tickets for All Workers on HVTTs

	Class 30
Designation	30-1
Equipment	Requirement
IRATA accreditation for high rope work	M
Tower rescue training	M
Working at heights training	M
First aid training	M

Note 1: M = Mandatory that equipment is owned or can be hired/leased/borrowed.

O = Optional.