

# STANDARD PDCA P8-04



## CONTRACTING ENTITY'S RESPONSIBILITY FOR MAINTENANCE OF PAINTS AND COATINGS

### 1. Scope

- 1.1. This standard addresses the responsibility of the owner to implement an appropriate maintenance program. Proper paint and coatings maintenance (clear or pigmented) reduces the detrimental effects of time, abrasion, environment, impact and other forces on the aesthetic, identifying and other protective properties of paints and coatings.
- 1.2. This standard will improve communication between the Contracting Entity and the Painting and Decorating Contractor for the purpose of keeping the paints and coatings intact and capable of performing their intended function(s).
- 1.3. This standard describes the basic steps for the Contracting Entity to implement an effective paint and coatings maintenance program.

### 2. Significance and Use

- 2.1. All surfaces that have previously had paints and coatings applied (which are intended to perform a decorative, identifying and/or a protective function) benefit from timely inspection and repair.
- 2.2. Touch-up or repainting becomes a "maintenance procedure" at the point in time after the Painting and Decorating Contractor has fulfilled the obligation of

the original contract. Touch-up is defined in PDCA, Standard P1-04, Touch-up Painting and Damage Repair-Financial Responsibility.

### 3. Reference Documents and Standards

- 3.1. ASTM, D16-00 Standard Terminology for Paint, Related Coatings, Materials and Applications.
- 3.2. SSPC, Surface Preparation Standards, Paint Application (PA Guide 5), Guide to Maintenance Painting Programs.
- 3.3. FSCT, (Federation of Societies for Coatings Technology), Coatings Encyclopedia Dictionary, edited by Stanley LeSota, 1995.
- 3.4. Manufacturer's Product Data Sheets
- 3.5. Merriam Webster's Collegiate Dictionary, Tenth Edition, Copyright 1993.
- 3.6. PDCA, Standard P1-04, Touch-Up Painting and Damage Repair- Financial Responsibility.
- 3.7. PDCA, Standard P2-04, Third Party Inspection Qualifications and Responsibilities.
- 3.8. PDCA, Standard P9-04, Definition of Trade Terms.

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**3.9.** PDCA, Painting and Decorating Craftsman's Manual and Textbook, 1995, 8<sup>th</sup> edition.

**3.10.** MPI, The Master Painter's Glossary-Painting and Decorating Terminology, 1997 & 2004.

**3.11.** Webster's New World Collegiate Dictionary, 4<sup>th</sup> Edition, 2002.

**3.12.** SSPC, Protective Coatings Glossary.

**3.13.** If there is any conflict between any of these references and this document, the requirements of this standard shall prevail.

### 4. Definitions

**4.1. AGGRESSIVE ENVIRONMENT (CONDITION):** Examples include but are not limited to: frequent chemical exposures (splash, spillage, fumes), immersion service, secondary containment service, high heat service, marine service, and geographic regions with wide temperature ranges, prolonged exposure to ultra-violet rays and high humidity. [PDCA, P9-04]

**4.2. COATING:** 1) Generic term for paints, lacquers, enamels, printing inks, etc.; 2) A liquid, liquefiable or mastic composition which is converted to solid protective, decorative or functional adherent film after application as a thin layer. It also refers to films applied to paper, plastics or foils. [ASTM] [FSCT]

**4.3. COATING DAMAGE:** A reduction or loss of protective, aesthetic or identifying characteristics resulting from

physical impact, intense heat, excessive moisture, chemical contact or other external factors. Damage includes, but is not limited to, blisters, rust bloom, chipping, cracking, peeling and other forms of delamination, color change and excessive wear. [PDCA, P9-04]

**4.4. CONTRACTING ENTITY:** The general contractor, owner of the property, construction manager, developer or other entity legally responsible for the agreement, or authorized agent of any of the above. [PDCA, P9-04]

**4.5. ENVIRONMENT:** 1) The circumstances, objects or conditions by which one is surrounded. 2) The complex of physical, chemical and biotic factors that act upon an organism or structure and ultimately determine its form and survival. [Merriam-Webster's Collegiate]

**4.6. MAINTENANCE:** Maintaining or being maintained; upkeep, support, defense, etc.; specifically, the work of keeping a building, machinery, etc. in good repair. [Webster's]

**4.7. MAINTENANCE PAINTING:** 1) Any coating work done subsequent to that associated with construction. 2) In broader terms, all repainting of industrial structures for protection or aesthetics. [Craftsman's]

**4.8. PAINT:** Any pigmented liquid, liquefiable, or mastic composition designed for application to a substrate as a thin layer, which is converted to an opaque solid film after application. [SSPC]

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**4.9. PAINT DAMAGE:** See Coating Damage.

**4.10. PAINTING AND DECORATING CONTRACTOR:** The individual or company contracted to apply paints, coatings, wallcoverings and other decorative finishes. [PDCA, P9-04]

**4.11. SPECIFICATION:** A clear accurate description of the technical requirement for material products, or services, which specifies the minimum requirement for quality and construction of materials and equipment necessary for an acceptable product. In general, specifications are in the form of written descriptions, drawings, prints, commercial designations, industry standards and other descriptive references. [FSCT]

**4.12. QUALITY OF APPEARANCE:** Aesthetics; conception of beauty, a particular taste for or approach to what is pleasing to the senses and especially sight. [Merriam-Webster's]

**4.13. SUBSTRATE:** A variant of substratum. In painting, any surface to be painted, including wood, concrete, masonry, steel, other metals, and various other materials or previous paints. A substrate can, therefore, be bare or covered. A previously unpainted surface sometimes is called the "original substrate". [MPI]

**4.14. SURFACE:** 1) The substrate to which paints, coatings, or wallcoverings are applied. 2) The finish obtained after the coating work has been completed. [Craftsman's]

**4.15. WARRANTY:** A guarantee or an assurance, explicit or implied, of something having to do with a contract,

as of sale; esp., the seller's assurance to the purchaser that the goods or property is or shall be as represented and if not, will be replaced or repaired. [Webster's]

## 5. Standard Specification

**5.1.** Periodic inspections of all painted and coated surfaces shall be conducted as required by type(s) of paint and coating materials, area(s) of use and type of exposure. Inspections are the responsibility of the Contracting Entity or a qualified third party.

**5.1.1.** The time frame for surface inspections shall be set forth by the Painting and Decorating Contractor, and conveyed, in writing, to the Contracting Entity.

**5.1.1.1.** The Painting and Decorating Contractor's recommendation for inspection frequency shall be inclusive of the paint or coating manufacturer's recommendation(s) for inspection frequency and service life.

**5.1.2.** The Contracting Entity or a qualified third party shall jointly perform the inspection with the Painting and Decorating Contractor.

**5.2.** All areas requiring corrective actions shall be documented.

**5.2.1.** It is the responsibility of the Contracting Entity or a qualified third party to ensure that areas to be corrected are properly documented.

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**5.2.2.** Corrective actions can extend to underlying causes of the paint or coating deterioration or failure including, but not limited to, moisture intrusion, damaged or missing caulking, container leaks, aggressive environment, substrate expansion and contraction and structure settlement.

**5.3.** All procedures necessary for the performance of the corrective actions shall be documented.

**5.3.1.** Corrective actions required to be performed by other trades prior to maintenance painting must be completed to avoid continued deterioration.

**5.3.2.** It is the responsibility of the Contracting Entity or a qualified third party to ensure that the corrective actions are properly completed.

**5.4.** Maintenance procedures shall be scheduled and followed to ensure that all repainting or recoating adheres to manufacturers' instructions.

**5.5.** The Contracting Entity shall contact the Painting and Decorating Contractor promptly to resolve any unanticipated problems that arise between scheduled inspections.

## 6. Comments

**6.1.** Painting and coating deficiencies that occur during the completion and under the terms of the original contract shall be addressed through the use of PDCA,

Standard P1-04, Touch-up Painting and Damage Repair: Financial Responsibility.

**6.2.** Paints or coatings that become damaged or suffer serious film degradation may exhibit reduced effectiveness of protection, decoration or identification of the substrate. When this occurs, neglect of maintenance places the substrate at risk for continued degradation and may lead to complete substrate removal and replacement.

**6.3.** Implementation of routine inspection and maintenance of paints and coatings will in most cases preserve the integrity of paint and coating systems.

**6.4.** This standard identifies the procedures required for a successful and cost-effective maintenance program.

**6.5.** This standard clarifies areas of responsibility. Improved communication reduces misunderstandings.

**6.6.** This standard is a nationally recognized consensus document for the Painting and Decorating industry's work practices.

## 7. Disclaimer of Liability

PDCA does not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any of the information contained herein.