SSPC: The Society for Protective Coatings

QUALIFICATION PROCEDURE NO. 1

Standard Procedure for Evaluating the Qualifications of Industrial/Marine Painting Contractors

(Field Application to Complex Industrial Steel Structures and Other Metal Components)

1. Scope

1.1 This procedure describes a method for evaluating the primary qualifications of industrial/marine painting contractors and defines a minimum standard for qualification.

1.2 The purpose of this procedure is to determine whether a contractor:

a. Has a corporate organization that clearly defines the authority and responsibilities of positions typically required for operation of an industrial/marine coating contracting firm;
b. Employs qualified management and utilizes qualified craft personnel and other workers;
c. Has established and implemented a quality management system meeting the requirements of Sections 4.3 and 4.3.3;
d. Has established and implemented a written worker safety and health program meeting requirements of Sections 4.4 and 4.4.1 and any project-specific requirements;
e. Has established and implemented environmental protection procedures meeting requirements of Section 4.4.2 and any project-specific requirements;
f. Demonstrates knowledge of industry technical standards and good painting practice.

1.3 This procedure encompasses the field application of protective coatings for corrosion control in the industrial, marine, highway, municipal, military and other sectors where steel structures and other metal components are protected. Specialty applications, such as thermal spray metallizing, coating and surfacing of concrete, bituminous products, galvanizing, and handling, managing and containing of hazardous materials and debris are not covered by the requirements of this procedure. SSPC has developed additional contractor qualification procedures to evaluate firms who perform thermal spray metallizing (QP 6), install polymer coatings and surfacings over concrete (QP 8) and who perform hazardous paint removal, such as deleading of industrial structures prior to protective coating application (QP 2).

1.4 This procedure encompasses surface preparation and coating application and related operations conducted on steel or other metal structures in the field, or maintenance coating of structural steel or other metal components in laydown areas. AISC 420-10/SSPC-QP 3 "Certification Standard for Shop Application of Complex Protective Coating Systems," covers coating operations on newly fabricated steel performed exclusively at a fixed shop facility. See Section 6 of this procedure.

This standard was first issued in 1989 by the SSPC C.3.5 Applicator Prequalification Committee. It was revised in 1998, 2008, and 2013.

2. Description

2.1 DEFINITIONS:

Auditor: The person or persons performing audits on behalf of the Qualifying Agency in compliance with the requirements of this procedure and the Qualifying Agency's audit program.

Certified Application Specialist: A Craft Worker holding a current certification as an Application Specialist in accordance with SSPC-ACS 1/NACE No. 13, "Industrial Coating and Lining Application Specialist Qualification and Certification"

Coating Application: Installation of a coating, system of coatings, lining, or similar product onto a surface. Coating Application methods include but are not limited to spraying, brushing, troweling, or rolling.

Complex Structure: Industrial or marine steel or other metal structures containing a variety of shapes and configurations, such as metal producing and rolling mills, ships and other marine vessels and structures; bridges and towers; processing facilities, including chemical and petrochemical processing plants and distribution facilities; pulp and paper mills; power generation plants and substations, food and beverage plants and terminals, water processing and waste treatment facilities; storage tanks, and other industrial and marine steel or other metal structures. This also includes any other metal components affixed to the structure such as truss beams and support structures.

Contractor: A firm whose business is providing Surface Preparation and Coating Application and related services and which is the subject of the evaluation described in this standard.

Craft Worker: One who performs Surface Preparation, Coating Application, or both.

Environmental, Health and Safety Manager: An employee of the Contractor, designated by Executive Management to be responsible for management, maintenance, and enforcement of the Contractor's plans for

compliance with applicable safety, health and environmental regulations (see Section 4.3.1.3).

Executive Management: The owner(s) of the Contractor company or the person(s) responsible to the company ownership for overseeing the affairs of the company, with the authority to make decisions affecting policies and Procedures above the project management or field operations level of the organization. Examples include officers, general managers, department managers, and other senior leadership.

Facility Owner: The public or private owner or custodian of assets subject to Surface Preparation and Coating Application work, to which the Contractor has a direct or indirect contractual obligation to provide such services.

Field Application: Surface Preparation and Coating Application to Complex Structures in the field or maintenance coating of structural components or equipment located in a laydown area.

Procedure: The written sequence of steps taken to carry out a particular course of action.

Qualification: Written assurance given by a Qualifying Agency that a Contractor conforms to the prescribed set of conditions or requirements of this procedure.

Qualifying Agency: An organization (e.g., certifying agency or Facility Owner) responsible for sponsorship or operation of a program to ensure uniform compliance with the provisions of this procedure.

Quality Control Supervisor: A qualified employee designated by Executive Management who is responsible for implementation and maintenance of the firm's quality management system for Surface Preparation and Coating Application operations (see Section 4.3.1.1).

Surface Preparation: Any method of treating a surface to prepare it for coating. Surface Preparation methods include washing with water, detergent solution, or solvent; cleaning with hand or power tools; water washing or jetting with or without abrasive; or abrasive blast cleaning.

2.2 TYPES OF STRUCTURES: Complex Structures encompass a wide range of structure types and configurations. Although the required evaluation functions are similar for all, the skills required to work on a specific type of structure can be different.

Some examples of Complex Structures for which specific skills are often associated are listed below:

- Marine/splash zone: These include structures proximate to and remote from both coastal and inland shorelines such as waterfront structures, locks, dams, ship hulls, flight decks, tanks and voids, bulkheads, piers, pilings, and offshore platforms and structures
- Bridges and towers
- Metal and manufacturing facilities
- Chemical and processing facilities: These include chemical and petrochemical plants, pulp and paper mills, food and beverage plants, and water and waste treatment facilities and related storage and distribution facilities
- Power generation and distribution facilities

2.3 FUNCTIONS TO BE EVALUATED: This procedure identifies four functional areas to be evaluated:

- Management procedures;
- Technical Capabilities;
- Job Quality Monitoring; and
- Safety, Health and Environmental Compliance.

General requirements for each of these functional areas are presented in Section 4.

2.4 EVALUATION PLANNING: The Qualifying Agency shall develop criteria and/or rating plans to evaluate each contractor against this standard. The Qualifying Agency shall also determine which of the specific items deemed critical within the four functional areas are to be evaluated for subsequent follow-up evaluations, ensuring the items evaluated are the same for all Contractors. The sequence of steps for conducting an evaluation within a certification program is outlined in Section 5. The initial evaluation, in each instance, will be performed by the Auditor and shall include observation of the Contractor's operational capability on an active Complex Structure painting project under contract.

3. Referenced Standards

3.1 Standards marked with an asterisk (*) are referenced only in the Notes, which are not requirements of this standard.

3.2 If there is a conflict between the requirements of any of the cited referenced standards and this standard, the requirements of this standard shall prevail.

3.3 SSPC Standards and Joint Standards

SSPC-ACS 1/ NACE No. 13	Industrial Coating and Lining Application Specialist Qualification and Certification
SSPC-QP 3/ AISC 420	Certification Standard for Shop Application of Complex Protective Coating Systems
SSPC-Guide 17	Guide to Developing a Corporate Safety Program for Industrial Painting and Coating Contractors
SSPC-QP 2	Standard Procedure for the Qualification of Painting Contractors (Field Removal of Hazardous Coatings from Industrial and Marine Steel Structures)

3.4 ASTM International Standard[1]

D3276 Standard Guide for Painting Inspectors (Metal Substrates)

4. General Qualification Requirements

4.1 MANAGEMENT PROCEDURES: Procedures shall exist for disseminating company policy and for personnel, administrative and financial management as follows:

4.1.1 Contractor Policy: The Contractor shall have:

a. Written policies stating its commitment to quality work, worker safety and health and environmental compliance.

b. Procedures for disseminating company policies to employees and those personnel working under its direction. The Contractor shall show that Procedures are followed.

4.1.2 Organization and Personnel: The contractor shall maintain:

a. A company-approved organization chart. The chart shall be updated as changes occur, approved and dated by a member of Executive Management, showing division of responsibility within the contracting firm by name of person and title. Documentation and observation shall show that responsibilities are carried out in accordance with the organization chart. Key management personnel (e.g., production manager, Quality Control Supervisor, and Environmental, Health and Safety Manager shall be full-time employees of the contracting firm and report to Executive Management.

b. A list of names, titles, duties, and job descriptions for key personnel (management, technical, quality control, safety, health and environmental compliance). The job descriptions shall state the experience, licenses, certifications and training and refresher training required for each position.

4.1.3 Administrative and Management Procedures: The Contractor shall maintain:

a. A brief written description of the Contractor's method of financial record keeping.

b. Written confirmation by a CPA, ACCA-certified[2], or equivalent accounting professional that the Contractor's operating accounting systems and procedures follow generally accepted accounting principles for the jurisdiction in which it operates.

c. Documentation of review of contract specifications.

d. Procedures to review and distribute specifications to all employees who manage and affect projects.

e. Procedures for learning about and complying with federal, state and local administrative, environmental protection, and worker health and safety regulations applicable to projects performed by the Contractor. A person in the organization shall be assigned the task of keeping track of new, revised and withdrawn regulations and informing Executive Management of the impact of regulatory changes on the company's operations.

f. Documentation that it is a legally viable entity in the locations in which it operates. Examples include: filing of appropriate company ownership/ incorporation papers; filing of tax returns in a timely manner; holding current business licenses and maintaining valid insurance coverage; maintaining a tax ID number; and other evidence as required.

g. Documentation of compliance with Section 4.5, "Subcontracting, Assignment, and Delegation"

h. Records of any citations or fines concerning worker safety and health, wage and hour, tax, and other applicable code or governing regulations, and documentation that actions are taken to avoid repeat violations.

4.2 TECHNICAL CAPABILITIES: The Contractor shall maintain documented history of performing Complex Structure Surface Preparation and Coating Application and shall maintain evidence that it utilizes qualified personnel and appropriate technical resources, equipment, and facilities. Evidence, at a minimum, shall include the following:

4.2.1 Craft Worker Qualifications: The Contractor shall have a written Craft Worker assessment and proficiency monitoring program that defines Procedures the company uses to initially qualify, train and evaluate and document the proficiency of all Craft Workers under its supervision. The worker assessment program shall meet the performance requirements of Mandatory Appendix A and evidence of its implementation shall be documented.

4.2.2 Technical Resources:

a. The Contractor shall maintain access to relevant technical and industry expertise through technical societies, trade associations, or other industry groups (universities, major manufacturers, consultants). The Contractor shall maintain current membership certificates or correspondence documenting any formal associations.

b. The Contractor shall maintain a library of current technical standards (e.g., ASTM International, SSPC, American Petroleum Institute,[3] American Water Works Association,[4] NACE International[5]), technical bulletins, publications, product data

[1] ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. For referenced ASTM standards, visit the ASTM website, www.astm.org, For Annual Book of ASTM Standards volume information, refer to the standard's Document Summary page on the ASTM website.

[2] Association of Chartered Certified Accountants (ACCA). This international association is best contacted through their website <https://www.accaglobal.com>

[3] American Petroleum Institute (API), 1220 L St. NW, Washington, DC 20005-4070.

[4] American Water Works Association (AWWA), 6666 W. Quincy Avenue, Denver, CO 80235..

[5] NACE International, 1440 South Creek, Houston, TX 77084-4906.

sheets, SDSs and other technical references invoked by procurement documents (project specifications).

4.2.3 Procedures: The Contractor shall have Procedures that it uses to convert awarded contracts into specific plans to complete the work in accordance with the contract requirements. These include:

a. Logging receipt of specifications and revisions and recording recipients, as well as removing obsolete or superseded documents from the workplace.
b. Documenting communication or meeting notes or pre-job conference discussions, which note exceptions to specifications, omissions, errors, conflicting requirements or other clarifications prior to beginning work.
c. Communicating specification requirements in writing to field crews and their supervisors.
d. Quality control programs. Work procedures shall specifically define quality control methods and criteria (see Sections 4.3.2 and 4.3.3 below).
e. Process Control Procedures or work plans (see Section 4.3.2 below).

4.2.4 Experience, Facilities, and Equipment:

a. The Contractor shall maintain a list of projects on Complex Structures currently in progress and projects completed within the previous 18 months that support the Contractor's suitability for certification. The list shall include the following:
   - Name, address, and principal contact(s) of Facility Owners, general contractors, or other clients, including specific contact information (e.g., cell phone, land line phone, e-mail address, mailing address).
   - Scope of coating and lining work performed.
   - Product names of materials used (e.g., abrasives and applied coatings and linings).
   - Equipment used for Surface Preparation and Coating Application.
   - Types and number of personnel used to supervise and perform the work.
   - Special requirements or special provisions (e.g., extraordinary safety or environmental compliance requirements; traffic control; other job-related restrictions).
b. The contractor shall maintain evidence of successful completion of the company's three most recent Complex Structure painting projects. Examples of evidence include: copies of current evaluations of the Contractor by Facility Owners; letters of commendation; statements confirming final payment and acceptance of work or equivalent documentation.
c. The Contractor shall notify the Qualifying Agency of any contracts that it failed to complete due to default, or cause, and explain the cause.
d. The Contractor shall notify the Qualifying Agency of any project that has entered litigation or arbitration and explain the cause.
e. The Contractor shall notify the Qualifying Agency of any disbarments, disqualifications due to defective work, termination for cause, unsatisfactory performance, regulatory non-compliance, fraud, illegal activities, or any legal actions concerning alleged business operation violations.
f. The Contractor shall maintain written description of preventive maintenance and repair Procedures for equipment used, including preventive maintenance and repair logs.

4.3. JOB QUALITY MONITORING: The Contractor shall demonstrate that it uses qualified personnel and proper inspection and recording Procedures for job quality control. Documentation shall be provided that shows objective evidence of conformity to contract requirements and good painting practices.

4.3.1 Personnel Qualifications: The contractor shall demonstrate that personnel performing quality control and related functions are trained and qualified and have written authority from Executive Management to perform their jobs.

4.3.1.1 Quality Control Supervisor: The Contractor shall designate a qualified employee to perform the duties of a Quality Control Supervisor to manage the Contractor's quality monitoring processes. The Quality Control Supervisor shall have at least three years of protective coatings industry experience and shall have successfully completed the following training:[6]

- A two-day or 16-hour course in quality control supervision specific to the coatings industry. Acceptable courses include SSPC Quality Control Supervisor or equivalent third-party certification acceptable to the Qualifying Agency
- A third-party coatings inspector certification at level 2 or higher. Acceptable certifications include SSPC Bridge Coating Inspector (BCI) Level 2 or Protective Coatings Inspector (PCI) Level 2, NACE Coating Inspector Program (CIP) Level 2, FROSIO Surface Treatment Inspector Certificate Level II,[7] ICorr Painting Inspector Level 2,[8] BGAS-CSWIP Painting Inspector Grade 2[9], or equivalent

[6] Persons who have been employed as the QCS of a contractor certified to the 2008 version of SSPC-QP 1 Section 3.3.1 prior to the effective date of this revision of QP 1 will be accepted.

[7] FROSIO, P.O. Box 7176 Majorstuen, 0307 Oslo, Norway. More information available at <http://www.frosio.no>

[8] The Institute of Corrosion or Correx Ltd (ICorr), The Newton Building, St.George's Avenue, Northampton NN2 6JB, UK. More information available at <http://www.icorr.org>

[9] British Gas CSWIP Painting Inspector Grade 2. TWI Certification Ltd. Granta Park, Great Abington Cambridge CB21 6AL, U.K. More information available at <http://www.twitraining.com>