

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 requirements of Sections 3.3.2 and 3.3.3;
- d. Has established and implemented a written worker safety and health program meeting requirements of Section 3.4.1 and 3.4.2 and any project-specific requirements;
- e. Has established and implemented environmental protection procedures meeting requirements of Section 3.4.3 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 standard 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 standard procedure.

2. Description

2.1 DEFINITIONS:

Auditor: 1) The person or persons performing audits on behalf of the qualifying agency. 2) The person(s) possessing the necessary technical and quality system auditing skills to review contractor submittals, conduct on-site audits of applicants, and report findings to the qualifying agency's program administrator in compliance with the requirements of this procedure and the written requirements of the formal audit program.

Complex Structure: Industrial 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. Complex structures also include any other metal components affixed to the structure such as truss beams and support structures, etc.

Contractor: A firm whose business is providing surface preparation and coating application and related services for corrosion control in the industrial and marine sectors.

Environmental, Health and Safety Manager: A qualified employee designated by executive management who is responsible for management, maintenance, and enforcement of the contracting company's plans for compliance with applicable safety, health and environmental regulations (see Section 3.3.1.3).

Field Application: Surface preparation and application of coatings to steel or other metal structures in the field such as tanks, ships, or bridges or maintenance coating of structural components or equipment located in a laydown area.

Loss Control: Multidisciplinary approach in which human, engineering, and risk management practices are employed to reduce the frequency or severity of losses.

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

Qualification: The procedure by which written assurance is given that a contractor conforms to the prescribed set of conditions or requirements of this standard 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 a standard.

Quality Control Inspectors: Persons designated to perform quality control inspections in the field in accordance with any contract requirements and the contractor's quality program (see Section 3.3.1.2).

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 coating and lining operations (see Section 3.3.1.1).

2.2 TYPES OF STRUCTURES: Complex structures and components encompass a wide range of structural steel and other metal types and configurations. Although the required evaluation functions are similar for all complex structures, the specific skills (e.g., rigging or pollution controls) are frequently quite different for painting a bridge or painting a process facility or an ocean-going vessel.

Some examples of industrial/marine 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:
 - Proximate includes waterfront structures, locks, dams, ship hulls, flight decks, tanks and voids, bulkheads, piers, pilings, etc.
 - Remote includes offshore platforms and structures, etc.
- 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: The 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 function areas are presented in Section 3.

2.4 EVALUATION PLANNING: The qualifying agency must 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 4. The initial evaluation, in each instance, will be performed by the auditor and must include observation of the contractor's operational capability on an active industrial/marine painting project under contract.

3. General Qualification Requirements

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

3.1.1 Contractor Policy: The contractor shall have:

- a. Written policies stating its commitment to quality work, worker safety and health and environmental compliance.
- b. Written procedures for disseminating company policies to employees and those personnel working under its direction. The contractor shall show that procedures are followed.

3.1.2 Organization and Personnel: The contractor shall have:

- a. A company-approved organization chart (updated as changes occur, signed, and dated by the responsible company executive (RE) showing division of responsibility within the contracting firm by name of person and title. Documentation and observation must show that responsibilities are carried out in accordance with the organization chart. Key management personnel (e.g., production manager, quality control supervisor, and safety and environmental manager) shall be full-time employees of the contracting firm and report to the RE.
- 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.

3.1.3 Administrative and Management Procedures: The contractor shall provide:

- a. A brief written description of the contractor's method of financial record keeping.
- b. Written confirmation by a CPA firm or equivalent accounting professional that the contractor's operating accounting systems and procedures follow established and accepted accounting practices and principles.
- c. Documentation of review of contract specifications.
- d. Procedures implemented by management to review and distribute specifications to all employees who manage and effect projects.
- e. Written procedures that have been established and implemented for learning about and controlling work

federal, state and local administrative, environmental protection, 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 the CEO and/or other management personnel of the impact of regulatory changes on the company's operations.

- f. Information 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 federal tax returns in a timely manner; Federal Tax ID/EIN statement; holding current state and/or local business licenses and maintaining valid insurance coverage; and other evidence as required.
- g. Documentation that approved subcontractors are selected on the basis of their ability to assist the contractor in meeting project requirements and any specific inspection requirements. The contractor has overall and ultimate responsibility to maintain all QP 1 requirements when delivered directly by subcontractors.
- h. Keep records of citations or fines concerning any and all federal, state, and local worker safety and health, wage and hour, tax, and other applicable code or governing regulations, and document that actions are taken to avoid repeat violations.

3.2 TECHNICAL CAPABILITIES: The contractor shall provide documented history of performing industrial/marine coating application, and shall provide evidence that it utilizes qualified personnel and appropriate technical resources, equipment, and facilities. Evidence, at a minimum, shall include the following:

3.2.1 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 at least annually evaluate and document the proficiency of all craft workers (i.e., persons performing repairs, surface preparation and coating and lining application) under its supervision. The worker assessment program must meet the performance requirements of Mandatory Annex A and evidence of its implementation must be documented.

3.2.2 Technical Resources:

- a. The contractor shall provide a list of technical societies, trade associations, or other industry groups (universities, major manufacturers, consultants) with which it is associated. Current membership certificates or correspondence shall be available at the home office location(s) to verify these associations.
- b. The contractor shall maintain a library of current technical standards (e.g., ASTM International,¹ SSPC,

American Petroleum Institute,² American Water Works Association,³ NACE International⁴), technical bulletins, publications, product data sheets, SDSs and other technical references invoked by procurement documents (project specifications).

3.2.3 Procedures: The contractor shall have written procedures that it uses to convert awarded contracts into field work orders, job work plans, instructions to craft workers, etc. These include procedures for:

- 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 to field crews and their supervisors.
- d. Quality control programs. Work procedures shall specifically define quality control methods and criteria (see Section 3.3.2 below).
- e. Process Control Procedures or Work Plans (see Section 3.3.2 below).

3.2.4 Experience, Facilities, and Equipment:

- a. The contractor shall provide a list of current (site based) jobs and jobs recently completed on complex industrial/marine steel and other metal structures 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, landline phone, email 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 and lining operations
 - 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 provide evidence of successful completion of the company's three most recent industrial painting projects. Examples of evidence include: copies of current evaluations of the applicant

¹ ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959

² American Petroleum Institute (API), 1220 L St. NW, Washington, DC 20005-4070.

³ American Water Works Association (AWWA), 6666 W. Quincy Avenue, Denver, CO 80235..

⁴ NACE International, 1440 South Creek, Houston, TX 77084-4906.