**Section 2120.1260 Quality Control System**

a) General

1) Before issuance or renewal of the Certificate of Authorization, the applicant must meet all requirements, including an acceptable written Quality Control System that shall include, but not be limited to, material control, fabrication, welding, nondestructive examination, testing and inspection.

2) The written Quality Control System shall also include provisions for making revisions, posting and dating changes in the program, enabling the system to be kept current as required.

3) The description and information of the system may be brief or voluminous, depending upon:

A) whether the organization's quality control manual accurately describes who is responsible for maintaining quality control; and

B) the size of the company holding the authorization and the number of employees assigned specific quality control duties.

4) In general, the Quality Control System shall describe and explain what documents and procedures the repair firm will use to validate a valve repair.

5) A review of the applicant's Quality Control System will be performed by a representative of the Division. The review will include a demonstration of the implementation of the provisions of the applicant's Quality Control System.

6) Each applicant to whom a Certificate of Authorization is issued shall maintain thereafter an up to date copy of its accepted Quality Control System Manual with the Division. Revisions to the Quality Control System Manual shall not be implemented until the revisions are accepted by the Division.

b) The following are the minimum requirements of the Division for a written Quality Control System for repairs of ASME safety and safety relief valves. It is essential that each valve repair organization develop its own Quality Control System that meets the requirements of its organization. For this reason, it is not possible to develop one Quality Control System that could apply to more than one organization. Some of these requirements are:

1) Title Page – The title page shall include the name and address of the company to which the Certificate of Authorization is to be issued. It shall also list the Sections of the ASME Code to which the repairs will apply.

2) Revision Log – A revision log is required to assure revision control of the Quality Control System Manual. The log shall contain sufficient space for date, description and section of revision, company approval and Division acceptance.

3) Contents Page – The contents page shall list and reference, by paragraph and page number, the subjects and exhibits contained in the manual.

4) Statement of Authority and Responsibility – A statement of authority and responsibility shall appear on company letterhead, dated and signed by an officer of the company verifying the following:

A) If there is a disagreement in the implementation of the written Quality Control System, the matter is referred to a higher authority in the company for resolution; and

B) The title of the individual authorized to approve revisions to the written Quality Control System and the method by which revisions are to be submitted to the Division for acceptance before implementation.

5) Organizational Chart – The organizational chart shall include all departments or divisions within the company that perform functions affecting the quality of the valve repair and show the relationship among the various departments or divisions.

6) Scope of Work – The scope of work section shall clearly indicate the scope and type of valve repairs the organization is capable of and intends to carry out, and shall include the type and sizes of valves that can be repaired. In addition, the testing media (steam, air, water, etc.) and pressure ranges should be included. The scope can be limited by engineering, machine tools, welding processes, heat treatment facilities, testing facilities, non-destructive examination (NDE) techniques or qualified personnel.

7) Drawings and Specification Control – The drawings and specification control system shall provide procedures assuring that the latest applicable drawings, specifications and manufacturer's available instructions required are used for valve repair, inspection and testing.

A) Specific reference shall be made to the materials used for the repair of the various valve parts (PG-73.2.3, Section I and UG-136(b)(3), Section VIII, Division 1 of the ASME Code).

B) Mechanical requirements shall comply with the ASME Code. See applicable Code Section.

8) Material and Part Control – The material and part control section shall describe procurement of parts from the original valve manufacturer or their designated representative, if applicable, and of material with request for mill test certification as required. It shall also describe receiving, storage and issuance, as well as the following:

A) State the title of the individual responsible for the procurement of all material and parts.

B) State the title of the individual responsible for certification and other records as required.

C) All incoming material and parts shall be checked for conformance with the purchase order and, when applicable, the material specifications or drawings. Indicate how the material or part is identified and how identity is maintained by the Quality Control System.

D) All critical parts shall be fabricated by the valve manufacturer. Critical parts are defined as any part that may affect the flow passage, capacity, pressure rating or valve function.

9) Repair and Inspection Program – The repair and inspection program section shall include reference to a document (such as a report, traveler or checklist) that outlines the specific repair and inspection procedures to be used in the repair of safety and safety relief valves. Provisions shall be made to retain this document for a period of at least five years as a part of quality control traceability documents.

A) Each valve or group of valves shall be accompanied by the document referred to in subsection (b)(9) for processing through the plant.

B) The document referred to in subsection (b)(9) shall include material check, reference to items such as the welding procedure specifications (WPS), fit-ups, NDE technique, heat treatment, and pressure test methods to be used. There shall be a space for "sign-offs" at each operation to verify that each step has been properly performed for each valve.

C) The system shall include a method of controlling the repair or replacement of critical valve parts. The method of identifying each spring shall be indicated.

10) Welding, NDE and Heat Treatment (when applicable) – When welded repairs are made by the Certificate holder, the Quality Control System Manual shall indicate the titles of the persons responsible for the development and approval of the welding procedure specifications and their qualifications, and the qualifications of welders and welding operators. Welding procedures specifications and welders and welding operators shall be qualified under the requirements of the ASME Boiler and Pressure Vessel Code, Section IX. Similarly, NDE and heat treatment techniques must be covered in the Quality Control System Manual. When outside services are used, the Quality Control System Manual shall describe the system by which the use of those services meets the requirements of the applicable Section of the ASME Code.

11) Valve Testing and Setting – The Quality Control System Manual shall include provisions that each valve shall be tested and set and all external adjustments sealed according to the requirements of the valve manufacturer and as required by this Section. The seal shall identify the repair organization. Abbreviations or initials are permitted.

12) Valve Repair Nameplates – An effective valve stamping system shall be established to ensure proper stamping of each valve as required by Section 2120.1270. The Quality Control System Manual shall include a description or a drawing of the nameplate.

13) Calibration of Measurement and Test Gauges – The calibration of the measurement and test gauges system shall include the periodic calibration of measuring instruments and pressure gauges.

A) Pressure gauges used for setting valves are to be checked periodically (indicate time schedule) by the person authorized (indicate title). The method of gauge testing is to be indicated and results recorded.

B) Periodically, all master instruments shall be calibrated preferably, but not necessarily, to measuring equipment traceable to the National Bureau of Standards.

14) Controlled Copy – An up to date copy of the written Quality Control System Manual shall be submitted to the Division for review and acceptance. Revisions shall also be submitted for acceptance prior to being implemented.

15) Nonconformities – The system shall establish measures for the identification, documentation, evaluation, segregation and disposition of nonconformities. A nonconformity is a condition of any material, item, product or process in which one or more characteristics do not conform to the established requirements. These may include, but are not limited to, data discrepancies, procedural and/or documentation deficiencies, or material defects. Also, the titles of the individuals involved in this process shall be included.

16) Sample Forms – Forms used in the Quality Control System shall be included in the manual with a written description. Forms exhibited shall be marked "SAMPLE" and completed in a manner typical of actual valve repair procedures.

17) Individuality Important – It is extremely important that the manual describe and the operation implement the system of each repair organization firm while meeting the requirements of this Subpart.

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