

## § 179.7 Quality assurance program.

(a) At a minimum, each tank car facility shall have a quality assurance program, approved by AAR, that—

- (1) Ensures the finished product conforms to the requirements of the applicable specification and regulations of this subchapter;
- (2) Has the means to detect any nonconformity in the manufacturing, repair, inspection, testing, and qualification or maintenance program of the tank car; and
- (3) Prevents non-conformities from recurring.

(b) At a minimum, the quality assurance program must have the following elements

- (1) Statement of authority and responsibility for those persons in charge of the quality assurance program.
  - (2) An organizational chart showing the interrelationship between managers, engineers, purchasing, construction, inspection, testing, and quality control personnel.
  - (3) Procedures to ensure that the latest applicable drawings, design calculations, specifications, and instructions are used in manufacture, inspection, testing, and repair.
  - (4) Procedures to ensure that the fabrication and construction materials received are properly identified and documented.
  - (5) A description of the manufacturing, repair, inspection, testing, and qualification or maintenance program, including the acceptance criteria, so that an inspector can identify the characteristics of the tank car and the elements to inspect, examine, and test at each point.
  - (6) Monitoring and control of processes and product characteristics during production.
  - (7) Procedures for correction of nonconformities.
  - (8) Provisions indicating that the requirements of the AAR Specifications for Tank Cars (IBR, see §171.7 of this subchapter), apply.
  - (9) Qualification requirements of personnel performing non-destructive inspections and tests.
  - (10) Procedures for evaluating the inspection and test technique employed, including the accessibility of the area and the sensitivity and reliability of the inspection and test technique and minimum detectable crack length.
  - (11) Procedures for the periodic calibration and measurement of inspection and test equipment.
  - (12) A system for the maintenance of records, inspections, tests, and the interpretation of inspection and test results.
- (c) Each tank car facility shall ensure that only personnel qualified for each non-destructive inspection and test perform that particular operation.
- (d) Each tank car facility shall provide written procedures to its employees to ensure that the work on the tank car conforms to the specification, AAR approval, and owner's acceptance criteria.
- (e) Each tank car facility shall train its employees in accordance with subpart H of part 172 of this subchapter on the program and procedures specified in paragraph (b) of this section to ensure quality.
- (f) No tank car facility may manufacture, repair, inspect, test, qualify or maintain tank cars subject to requirements of this subchapter, unless it is operating in conformance with a quality assurance program and written procedures required by paragraphs

(a) and (b) of this section.

[Amdt. 179-50, 60 FR 49076, Sept. 21, 1995, as amended by Amdt. 179-50, 61 FR 33255, June 26, 1996; 68 FR 48571, Aug. 14, 2003; 68 FR 75759, Dec. 31, 2003]