

**105 QUALITY CONTROL PLAN.**  
**(REV 12-19-01) (FA 1-4-02) (7-02)**

PAGE 125. The following new Section is added after Section 104:

**SECTION 105**  
**QUALITY CONTROL PLAN**

**105-1 General.**

Certain materials require production under an approved Quality Control Plan to ensure that these materials, whether manufactured or processed, or procured from suppliers or subcontractors, meet the requirements of the Contract. Applicable materials are identified in 6-8. For all applicable materials included in the Contract, submit a Quality Control Plan prepared in accordance with the requirements of this Section to the Engineer. Do not incorporate any of these materials into the project prior to the Engineer's approval of the Quality Control Plan.

**105-2 Personnel Qualifications.**

**105-2.1 General:** Provide qualified personnel for sampling, testing and inspection of materials and construction activities. Ensure that qualifications are maintained during the course of sampling, testing and inspection. Continuance of the Department's qualifications are subject to satisfactory results from periodic Independent Assurance evaluations.

**105-2.2 Construction Training and Qualification Program (CTQP):** Refer to the Construction Training and Qualification manual.

**105-2.3 Other Qualification Requirements:** Refer to related specifications for additional personnel qualification requirements.

**105-3 Guidelines for Development of the Quality Control Plan.**

**105-3.1 General:**

Use the following guidelines for developing the Quality Control Plan. Respond to the items that are applicable to the material(s), and related production and field operations. Include other items in addition to these guidelines as necessary.

**105-3.2 Personnel:**

**105-3.2.1 Qualifications:** Submit the list of qualified technicians with their Training Identification Numbers (TIN) for all technicians performing sampling, testing and inspection for both field and laboratory tests. Include employed and subcontracted technicians.

**105-3.2.2 Level of Responsibility:** Identify the primary contact for the Department. Identify roles and responsibilities of various personnel involved in the quality control process.

**105-3.3 Raw Materials:**

**105-3.3.1 Source:** Identify the sources of raw materials. Provide locations and plant or mine numbers when applicable.

**105-3.3.2 Certification:** Describe methods of verifying compliance of certification with the specifications.

**105-3.3.3 Disposition of Failing Materials:** Describe the system for controlling non-conforming materials, including procedures for identification, isolation and disposition.

**105-3.4 Storage Facilities for Raw Materials:**

Describe measures and methods, including bedding details, for preventing segregation, contamination and degradation.

Describe methods of identifying individual materials. Where applicable, submit a site plan showing the locations of various materials.

**105-3.5 Production Equipment:**

Describe calibration frequencies, maintenance schedule and procedures for production equipment.

**105-3.6 Plant Requirements:**

**105-3.6.1 Plant Identification:** Provide the mailing address, physical address including county and X-Y coordinates of the plant, telephone and fax numbers, E-mail address, primary contact at the plant, responsible person in charge, approved facility number provided by the Department, Owner information and Vendor Number and other information as required.

**105-3.6.2 Process Control System:** Describe the methods and measures established to ensure Contract compliance for the produced materials that are supplemental to the Quality Control sampling and testing program described in the Contract. These methods and measures shall include, but are not limited to, inspection schedule, additional sampling and testing, maintenance schedule, etc.

**105-3.6.3 Loading and Shipping Control:** Describe the methods and measures for preventing segregation, contamination and degradation during loading and shipping operations. Describe the methods established for materials to be in compliance with the specifications at the point of use.

**105-3.6.4 Types of Products Generated:** Describe the products the plant is approved to produce under Department guidelines.

**105-3.7 Other Requirements:**

**105-3.7.1 Copy of Certification:** Attach examples of certifications issued by the plant/Contractor for the products approved by the Department.

**105-3.7.2 Statement of Compliance:** Include a statement of compliance with all quality requirements set forth by the Department including Contract Documents and other Department manuals.

**105-3.7.3 Information on Producer's Quality Control Plan:** Submit copies of the Department's approval of the Producers' Quality Control Plans.

**105-3.7.4 Describing Documentation Procedure:** Identify location of document storage to enable Department review. Include quality control charts, qualification/accreditation records, inspection reports, and other pertinent/supporting documents for an approved Quality Control Program.

**105-3.8 Final Manufactured Product – Plant Operations:**

Describe inspection schedule and methods for identifying defects and non-compliance with the specifications. Describe corrective actions and methods to resolve them.

**105-3.8.1 Storage:** When storage of the produced materials is required and it is not defined in the Contract Documents, describe the methods and duration for storage. Include measures and methods for preventing segregation, contamination and degradation during storage.

**105-3.8.2 Disposition of Failing Materials:** When not described in the specifications, describe the methods and measures for identifying and controlling the failing materials. Include preventive and corrective measures. Describe disposition of failing materials.

**105-3.9 Final Manufactured Product – Field Operations:**

**105-3.9.1 Transportation:** Describe the method of delivery from the point of production/storage to the point of placement.

**105-3.9.2 Storage:** When storage of the produced materials is required and it is not defined in the Contract Documents, describe the methods and duration for storage. Include measures and methods for preventing segregation, contamination and degradation during storage.

**105-3.9.3 Placement:** Describe the methods and identify the type of equipment used in incorporation of the materials into the project.

**105-3.9.4 Disposition of Failing Materials:** When not described in the specifications, describe the methods and measures for identifying and controlling the failing materials. Include preventive and corrective measures. Describe disposition of failing materials.

**105-3.10 Testing Laboratories:**

Identify the laboratories performing testing. Ensure that the testing laboratories comply with the Laboratory Qualification Program requirements of 6-9.

**105-4 Quality Control Plan Submittal.**

Submit the Quality Control Plan to the Engineer for approval within 21 calendar days after the Contract Award. The Engineer will review the Quality Control Plan and respond to the Contractor within 21 calendar days of receipt.

If at any time the Contractor is not in compliance with the approved Quality Control Plan, or a part thereof, affected portions of the plan will be disapproved. Cease work in the affected operation(s) and submit a revision to the Engineer. If the Quality Control Plan, or a part thereof, must be revised, submit the revision to the Engineer. The Engineer will review the revision and respond within seven calendar days of receipt.

Continue to work on operations that are still in compliance with the approved sections of the Quality Control Plan.