# Section 3.3

# CONTRACTOR'S QUALITY CONTROL PLAN

# 3.3.1 Purpose

This section describes the review and approval process of the *Contractor's Quality Control Plan (QCP)* when required per *Contract Documents*. This section also describes the process of suspending Contractor's work due to inadequate Quality Control (QC) Operations.

# 3.3.2 Authority

Sections 20.23(3)(a) and 334.048(3), Florida Statutes (F.S.)

# 3.3.3 Reference

Federal-Aid Policy Guide, 23 CFR 637

Standard Specifications for Road and Bridge Construction

Materials Manual

# 3.3.4 General

In compliance with <u>FHWA 23 CFR 637</u>, the Department chose to implement the "Contractor option". This option requires the Contractor to be responsible for QC on Department projects. *Specifications Section 105* details the requirements of a *Contractor's QCP*.

# 3.3.5 Contractor's QCP Review and Approval

The Contractor will submit the *Contractor's QCP*, in accordance with *Specifications Section 105*, to the Project Administrator (PA) for approval, seven (7) calendar days prior to beginning work on QC Program applicable material. The submittal provides the laboratories, technicians, production facilities, and structural concrete mix designs in the Department's Materials Acceptance and Certification system (MAC). MAC provides some feedback on the proposed data acceptability at the time of submittal.

**NOTE**: A QCP and QC Manager are required when a contract includes any quality control material identified in *Specifications 105-3*. If a contract does not have quality control

materials, then a QCP and QC Manager are not required. <u>An e</u>Examples of <u>a</u> contracts not requiring <u>a</u> QCP <u>can include</u> <u>is a</u> landscape <u>or lighting only</u> contracts.

## (A) Resident Level Responsibilities

The PA shall review the **Contractor's QCP** to ensure it is correct and complete using the checklist provided as a guide in <u>Attachment 3.3-1</u>, <u>Quality Control Plan Review</u> <u>Checklist</u>. All QC Program materials on the contract must be included in the Contractor's QCP prior to material being produced for the contract. Each QC Program material must have at least one production facility listed as the source of the material. Each production facility must have a **Producer's QCP** in acceptable status prior to material being produced for the contract. MAC will update the information with any status change to a technician, laboratory, production facility, or concrete mix design and will notify the PA of any production facility status changes.

The following information on the MAC template must be reviewed by the PA to determine acceptability:

- 1. Laboratories MAC provides a general laboratory status, but does not indicate if a laboratory is qualified in the specific test method(s) for the material. For example, if a laboratory is listed as an Earthwork Laboratory, the PA will review the test methods assigned on the laboratory profile to ensure the appropriate test methods for Soils/Earthwork Testing, such as FM 1-T180, are included. There is a report available in MAC to assist the PA with this review.
- 2. Bridge related supervisory personnel<u>Qualifications</u> The QC Manager must provide backup documentation by attaching the qualification information to the template and the PA must review to ensure the proposed personnel meet requirements of **Specifications Section 105-8.7**. Examples include
- 3.2. Grouting Technicians and Post Tensioning Technicians and bridge foremen The PA must confirm the technician holds a current certification. Construction Training Qualification Program (CTQP) database information may not be up to date, so the PA will confirm with the technician.
- 4.3. Commercial Inspection On contracts with Steel and Miscellaneous Metals materials that require commercial inspection, the PA must indicate in MAC if an optional inspection is being requested on any items or processes on the contract that do not typically require commercial inspection. The PA must also indicate if there are steel and miscellaneous metal items on the contract that will not be commercially inspected. The PA must ensure that the Contractor attaches the fabrication schedule for items that require commercial inspection and list the production facility or facilities that will be fabricating the items under the appropriate material type(s) 30 days before fabrication has begun per *Specifications Section 105-1.2.3*.

5.4. Structural Concrete Mix Designs – The PA must review the specific entries to ensure the project specific requirements, including *Special Provisions* and *Technical Special Provisions*, or plan notes are met.

The PA will ensure the QC Manager has included information on all QC Program materials in the contract, review any status indicators with the QC Manager, and determine if any status indicators will be a cause for concern at the time the phase of work will begin. If the status indicators can be resolved before the work begins, the PA shall accept that portion or portions of the **Contractor's QCP** in MAC.

The Department will accept or reject the proposed **Contractor's QCP** within ten (10) calendar days of submittal. No phase of work covered under the QC Program, as specified in **Specifications Section 105**, can begin until the PA has accepted the **Contractor's QCP** in MAC for that phase of work. If a portion of the **Contractor's QCP** is in compliance, the Contractor may begin work for that phase, but not for phases that are non-compliant.

## (B) District Level Responsibilities

The District Materials and Research Office (DMRO) concrete personnel will review the concrete mix designs submitted in the structural concrete portion of the *Contractor's QCP* to ensure the proposed production facility or facilities have the component materials on hand to produce the concrete mix designs. The DMRO concrete personnel review does not include determining if the concrete mix designs meet the requirements of the *Contract Documents*. The DMRO will indicate the status of the material availability within the 5 calendar days after the data is input into MAC by the Contractor for original submittals.

# 3.3.6 Contractor's QCP Updates

The *Contractor's QCP* often needs revising due to changes in personnel, mix designs, or production facilities. The Contractor will submit the proper information required to fulfill the changes/modifications of the *Contractor's QCP* updates and additional information through MAC at least five (5) working days prior to the implementation of any changes per *Specifications Section 105-5.1*.

## (A) Resident Office Responsibilities

Changes to the prior approved *Contractor's QCP* are accepted and approved by the PA in MAC. The Department will accept or reject the proposed QC Plan addendum within seven (7) calendar days after submittal.

#### (B) District Level Responsibilities

The DMRO concrete personnel will also review the concrete mix designs submitted for structural concrete as an addendum to the *Contractor's QCP* and make appropriate recommendations in MAC to the PA within five (5) calendar days of submittal by the Contractor.

## 3.3.7 Producer QC Stamp

#### (A) Resident Office Responsibilities

When QC Program materials are delivered to the project site, project personnel shall inspect the products for **Specifications** compliance, including the product's QC stamp. Unstamped products must be rejected. Stamped products should be inspected to ensure that they are being produced by the production facility that is listed on the **Contractor QCP**. The State Materials Office publishes photos for each production facility QC stamp as a resource for the project personnel to confirm the QC stamp. A link to the production facility's QC stamp can be found on the **Contractor QCP**.

# 3.3.8 Resolution Test Fee Schedule

## (A) Resident Office Responsibility

The PA shall furnish the Contractor with a fee schedule that will be used to establish a credit on the monthly estimate in the event that resolution tests performed by a Department compare favorably with the Verification Technician (VT) test results. The PA can obtain the fee schedule from the State Materials Office (SMO) website at:

www.fdot.gov/materials/navigation/documents.shtm

## (B) State Materials Office Level Responsibilities

The Director, Office of Materials shall publish a fee schedule that will be used to establish a credit on the monthly estimate for resolution tests performed by a Department's laboratory that compare, in accordance with the **Specifications**, with the Department's Verification test results. Such fee schedule shall be published annually, at the beginning of the fiscal year, for contracts let that fiscal year.

# 3.3.9 Suspension of Work due to Inadequate QC Operations

The following conditions may result in the suspension of the QC operations, in part or allinclusive:

- 1. Failure to comply with the requirements of *Specifications Section 105*, such as failure to timely supply information.
- 2. Repeated failure of materials to meet **Specifications** requirements.
- 3. Failure to take immediate corrective action relative to deficiencies in the performance of the QC program.
- 4. Notification from the State Materials and/or District Materials and Research Office in accordance with *Materials Manual 5.6*, such as certifying materials that are not produced under an approved Quality Control Program for use on Department projects.

#### (A) Resident Office Responsibilities

The RE or designee shall notify the Contractor within two (2) working days of finding a condition or conditions of inadequate QC Operations. Notification of such findings shall clearly state area(s) of concern and non-compliance with the **Specifications** and requirements of the **Contract Documents**.

Any verbal warning to the Contractor that all or part of the QC Operations is in nonconformance will be documented by the PA in the Daily Work Report and shown on the monthly Contractor's Past Performance Rating.

The PA shall issue a Deficiency Warning Letter (DWL) if the Contractor does not correct the finding(s) after receiving a verbal warning. The PA shall issue a DWL to notify the Contractor of shortcomings/non-compliances with QC Operations. Prior to issuing a DWL, the PA will discuss the performance concerns with the RE. A single DWL can be used to address concerns in more than one performance category.

Continued non-compliance after a verbal warning and DWL will require a Deficiency Letter (DL) to be issued. However, blatant violations or non-compliances may result in a DL being issued by the RE without a verbal warning or DWL.

Refer to *CPAM 13.1, Contractor's Past Performance Rating* for processing DWL and DL. Submit all DLs related to the QC Manager's failure to properly apply the *Contractor's QCP*, *Specifications* and/or quality control procedures to the QC Manager and the State Construction Office Training Coordinator.

The issuance of a DL by the RE could result in suspension of work due to QC Operations if the Contractor neglects to correct the QC Operations or continues to perform without sufficient QC Operations or **Specifications**. In the event the work is suspended due to inadequate QC Operations, such suspension must clearly state area(s) of concern and non-compliance with the **Specifications** and requirements of the **Contract Documents**. A sample letter for suspension of work for failure to provide adequate QC Operations is

provided in the <u>Attachment 3.3-2, Suspension of Work Due to Inadequate Quality</u> <u>Control Operations</u>.

### (B) State Construction Office Responsibilities

Per **Construction Training Qualification Manual (CTQM) Chapter 7**, the QC Manager's qualification shall be suspended when three DLs are issued related to the QC Manager's failure to properly apply the **Contractor's QC Plan**, **Specifications** and/or quality control procedures within a twelve (12) month period regardless of the contract for which the notifications are issued. For example, notifications can be issued for the same contract or for different contracts.

## 3.3.10 Attachments

## Attachment 3.3-1 Quality Control Plan Review Checklist

QCP Item	Υ	Ν	N/A
105-5.2 Personnel Qualifications			
Ensure all qualified personnel are listed with Technician Identification			
Number (TIN) for each qualification. The PA will review with the QC			
Manager any qualifications designated as anything other than			
qualified.			
Bridge Personnel			
The PA will confirm the bridge personnel qualifications, if			
applicable.			
Post Tensioning Level I			
Post Tensioning Level II			
Grouting Technician Level I			
Grouting Technician Level II			
Supervisory Personnel (Project Manager, Superintendent,			
Foreman, Surveyor)			
105-5.3 Production Facilities			
Are the production facilities listed?			
The PA will confirm that production facilities are included for all			
Quality Control Program materials that will be used on the project.			
The PA will review with the QC Manager production facilities			
designated as anything other than accepted/approved.			
105-5.3.1 Structural Concrete Mix Designs			
Are the concrete mix designs listed, if applicable?			
The PA will review the District Materials and Research Office			
(DMRO) Concrete personnel recommendations for use of			
structural concrete mix material availability.			
The PA will review the structural concrete mix designs for			
suitability related to project specific requirements.			
Do not accept or reject the concrete portion of the Contractor QC			
Plan until the DMRO concrete personnel complete the material			
availability review.			
105-5.4 Testing Laboratories			
Are the laboratories listed?			
The laboratory status provided by MAC is not sufficient to			
determine if the laboratory is approved for the designated material.			
The PA will review the laboratory test methods to ensure the			
laboratory is valid for the material designated.			

The PA will review any concerns with the listed laboratories with the QC Manager.			
105-1.2.3 Notification of Placing Order	<u> </u>	<u> </u>	
The PA will ensure the Contractor has identified if there will be			
commercial inspection need on the project.			
The PA will provide additional information about optional inspection			
requested for items not normally covered by commercial inspection			
(per PA's request).			
The PA will indicate if there are other steel and miscellaneous items			
on the project that will not be commercially inspected.			
The PA will ensure that the Contractor attaches the fabrication			
schedule 30 days before the fabrication begins.			

# Attachment 3.3-2 Suspension of Work Due to Inadequate Quality Control

Date

Contractor Name

Contractor Address

City, State Zip

RE: SUSPENSION OF WORK DUE TO INADEQUATE QUALITY CONTROL OPERATIONS

Dear Sir or Madam:

The Department has suspended operations due to Inadequate Quality Control Operations as defined below:

<Provide details - clearly state area(s) of concern and non-compliance with the Specifications and requirements of the Contract Documents>

The Department directs the Contractor to cease the phases of work deemed to be noncompliant. Resumption of such phases of work shall be dependent upon approval of the Engineer.

If you have any questions, please feel free to contact <Name of the Project Administrator> at <telephone number>.

Sincerely,

**Resident Engineer** 

cc: District Materials and Research Engineer