

## Volume I Section 5.7

### LABORATORY QUALIFICATION PROGRAM

#### 5.7.1 PURPOSE

To describe the Laboratory Qualification Program (LQP).

#### 5.7.2 AUTHORITY

Sections 20.23(4)(a) and 334.048(3) Florida Statutes

#### 5.7.3 SCOPE

Primary offices affected by this procedure include the State Materials Office (SMO), State Construction Office (SCO), District Construction Offices (DCO), District Materials and Research Offices (DMRO), and Resident Construction Offices (RCO).

#### 5.7.4 REFERENCES

Code of Federal Regulations (CFR), Federal-Aid Policy Guide (FAPG), Subchapter G - Engineering and Traffic Operations, Part 637 - Construction Inspection and Approval, Subpart B - Quality Assurance Procedures for Construction

Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Specifications)

#### 5.7.5 GENERAL INFORMATION

The LQP is defined in **Specifications Section 105**. A flow chart of the details, including feedback from SMO oversight is included in Appendix C.

Laboratories are qualified if the requirements of the LQP are met. A laboratory is considered approved when its name is listed in the – Qualified Labs Report located on the Materials Acceptance and Certification system (MAC).

#### 5.7.6 ISSUING QUALIFICATION

The following are the guidelines for issuing qualification:

Upon receipt of the completed **Laboratory Qualification Application – FDOT Form No. 675-000-05** (example Appendix B), a copy of the accreditation certificate, and supporting documentation:

- (A) The District LQP Manager or SMO LQP Coordinator will enter the lab information into MAC on the laboratory profile and assign a Lab ID as described below. They will then enter the test methods the lab has requested for qualifications in the “Test Method” tab. The test methods will default to a status of “In Progress” until the District LQP Manager or SMO LQP Coordinator designates them with a valid status.
- (B) The Lab ID is a unique identification number, beginning with a prefix (see chart below), followed by a two-digit district number or “SM” if the SMO is the managing district, and ending with a three-digit sequential number.

| Type                                   | Prefix   |
|--|----------|
| Asphalt                                | A        |
| Concrete                               | C        |
| Aggregate Mines & Terminals            | M        |
| Timber                                 | T        |
| Precast Drainage Products Precast Pipe | PC or PI |
| Departmental Labs                      | D        |
| Consultant & CEI’s labs                | I        |
| Contractor                             | R        |
| Local Agency Offices                   | L        |
| Liquid Asphalt                         | LA       |
| Asphalt Rubber                         | RU       |

Field offices do not receive a Lab ID in MAC. When a lab is located at a production facility with an accepted QC Program, match the Lab ID with the production facility ID. Lab ID Examples:

I + 01 + 003 = I01003

Precast Production Facility PC-30 = PC-30

If a situation exists that does not conform to the table above, please contact the SMO LQP Coordinator for guidance.

- (C) The DMRO or SMO will review the package for completeness and

accuracy. The package should include an application form with all specified required documents, a copy of a current certification from an accrediting agency recognized by the Department and a list of the test methods the laboratory is accredited to perform. Accuracy of the accreditation should be verified by visiting the accrediting agency's official website.

- (D) Once the decision is made to grant qualification for a test method, the District LQP Manager or SMO LQP Coordinator will update the status for that test method in MAC to "Valid" and attach necessary supporting documentation to the laboratory profile. If during review of the application or during the inspection of the laboratory a decision was made to not qualify the lab for a test method, update the status to "Inactive".
- (E) The District LQP Manager or SMO LQP Coordinator will update information and laboratory and/or test method status in MAC as needed.

### 5.7.7 SUSPENDING A LABORATORY

Criteria for laboratory suspensions are described in ***Specifications Section 105***.

The DMRO shall notify the laboratory, the DCO, and the SMO LQP Coordinator when the DMRE determines suspension is necessary. If the SMO is the managing district that determination will be made by the Director, Office of Materials. Such notification should detail the conditions leading to the suspension and the action required for reinstatement. The Qualified Labs Report will show the laboratory status as "Suspended" during the suspension.

The DMRO or SMO, when applicable, will coordinate such suspension with other DMROs and the SCO through email for statewide notification when the subject lab is active in more than one District.

Upon the laboratory's request, the DMRE or Director, Office of Materials will review and determine if the corrective actions and plan to prevent future occurrences are satisfactory, or whether further assurance is needed from the lab to end the suspension.

When a DMRO or the SMO determines that a lab has been suspended repeatedly for various reasons or in various areas of testing, the DMRE or Director, Office of Materials may suspend the lab for all test methods until the lab takes actions to correct the situation(s) and assures prevention of future

occurrences, to the DMRE's or Director's satisfaction.

### **5.7.8 DISQUALIFICATION**

Active, qualified laboratories must conform to the Department's practices about quality control (QC) operations. Should any qualified laboratory falsify records, the qualification will be subject to revocation by the DMRE or Director, Office of Materials. Falsification of project-related documentation will be subject to further investigation and penalty under state and federal Laws.

The DMRE or Director, Office of Materials shall be the authority who revokes qualification. Notification that the qualification has been revoked shall be by "return receipt requested" e-mail. A copy of the notification shall be sent to the DCE and to the SMO LQP Coordinator.

During the period of disqualification, the Qualified Laboratory list will show the laboratory's status as "Disqualified." This decision may be appealed to the Director, Office of Materials. The laboratory has fifteen (15) days from receipt of notice to appeal this decision.

The Director, Office of Materials' decision regarding revocation is final. Laboratories having their qualification revoked shall be eligible to apply for new qualification after a period of two (2) years from the date of disqualification.

### **5.7.9 MAC MAINTENANCE**

The District LQP Manager or SMO LQP Coordinator will update the Laboratory Profile in MAC when:

- a) A laboratory drops accreditation for a test method
- b) The laboratory closes
- c) A laboratory becomes suspended
- d) A laboratory becomes disqualified
- e) There are changes in the application data submitted for qualification

The District LQP Manager or SMO LQP Coordinator will review and approve all new test method(s) requested by the Laboratory Profile Manager for Laboratories with existing lab profile in MAC.

## 5.7.10 EVALUATING A LABORATORY

The DMRO and the SMO may perform laboratory evaluations when:

- (A) Equipment or test procedure deficiencies were noted by Independent Assurance (IA) evaluations.
- (B) The laboratory has demonstrated poor performance and is suspected of conditions that may lead to suspension as identified in **Specifications Section 105**.
- (C) The laboratory is initiating testing after being inactive or has not participated in the Department's Acceptance Program for the last six months.
- (D) The individual District or the SMO determines it is necessary to adequately assure adherence to plans, specifications, and testing standards. The scope and the frequency of evaluations will be determined by the DMRE or Director, Office of Materials in accordance with the minimum requirements listed below.

Laboratory evaluations shall be performed a minimum of once per year by DMRO or SMO staff at all active laboratories performing QC testing on Department projects, and a minimum of twice per year at all laboratories performing verification testing (VT) on Department project. Laboratory evaluations shall be conducted using the applicable checklists located at:

<http://www.fdot.gov/materials/quality/programs/independentassurance/checklist/index.shtm>

Laboratory evaluations may be conducted for any test method, process, or equipment. They shall include a random review of the laboratory's original test data. Reviews of this paperwork shall be conducted using the Laboratory Original Test Data Inspection Checklist provided at the above link. Laboratory evaluations should also include IA evaluations as necessary in accordance with **Materials Manual Section 5.5**.

## 5.7.11 REPORTING AN EVALUATION

The District LQP Manager or SMO LQP Coordinator will discuss the deficiencies with the Laboratory Manager and generate the Laboratory Qualification Performance Report (LQPR) in MAC within five (5) working days. The report will include all the deficiencies found and items requiring corrective

action. Response to deficiencies must be submitted within ten (10) working days from date of receipt of the LQPR.

A follow up evaluation may be necessary before a decision can be made.

A LQPR Example can be found in Appendix A.

### **5.7.12 RESPONSIBILITIES**

All contractors, subcontractors, producers, suppliers, and other laboratories participating in the Acceptance Program, performs tests meeting the requirements as stated in the **Contract Documents**.

Laboratories shall maintain their qualifications while participating in the program. Qualified laboratories will appear on the Qualified Labs Report.

The District LQP Manager or SMO LQP Coordinator should verify changes in the laboratory information and initiate necessary action.

Laboratories will notify the District LQP Manager or SMO LQP Coordinator when the laboratory changes its physical location, or equipment is moved to a new location. The District LQP Manager or SMO LQP Coordinator shall evaluate the laboratory's compliance with the qualification requirements and take necessary actions to assure the integrity of the testing performed by the laboratory including the equipment. The District LQP Manager or SMO LQP Coordinator may initiate a laboratory inspection or split sampling to aid the evaluation.

The laboratories shall be qualified to perform the test methods for which they are accredited. When an accreditation does not include **Florida Sampling and Testing Method (FSTM)** accreditation, an equivalent national method will be required.

Technicians and equipment used in acceptance decisions will be evaluated in accordance with the requirements of the IA Program.

Laboratories under contract with the Department shall further be subject to requirements of the Department's LQP.

### **5.7.13 TRAINING**

None required.

## 5.7.14 FORMS

***Laboratory Qualification Application - FDOT Form No. 675-000-05*** can be accessed from the links below. For convenience, both a pdf and Word document are available.

[Laboratory Qualification Application \(.pdf\)](#)

[Laboratory Qualification Application \(.docx\)](#)

## APPENDIX A



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
LABORATORY QUALIFICATION PERFORMANCE REPORT

Laboratory Information

Lab ID: DSM001  
Lab Name: State Materials Office  
Lab Address: 5007 NE 39th Avenue State of Florida, Gainesville, FL 32609  
Lab Manager: Timothy Ruelke  
Email Address: Timothy.ruelke@dot.state.fl.us  
Telephone No: (352) 955-8620

|                        |              |                     |                |
|------------------------|--------------|---------------------|----------------|
| MAC Evaluation ID:     | 0000001626   | Evaluation Type:    | IA Observation |
| Date(s) of Evaluation: | 4/15/2016    | Evaluation Area(s): | Aggregate      |
| Evaluation Status:     | Satisfactory |                     |                |

IA Observation

|   |        |
|---|--------|
| Checklist: AASHTO T 27 - Sieve Analysis of Fine and Coarse Aggregate [Equipment]        | PASSED |
| Checklist: FM 1-T 011 - Total Materials Finer than 75-um No. 200 Sieve [Equipment]      | PASSED |
| Checklist: FM 1-T 085 - Specific Gravity and Absorption of Coarse Aggregate [Equipment] | PASSED |

Comments:

|   |                       |
|---|-----------------------|
| <u>Murrel Hines</u>                                   | <u>April 15, 2016</u> |
| Signature of Independent Assurance Evaluator/Observer | Date Approved         |

Recipients: Lab Manager Timothy Ruelke  
Contact Person Butch Hines





## Florida Department of Transportation

675-000-05  
07/20  
Materials

### Materials Acceptance & Certification (MAC) New Company Profile

#### Applicant Information

Company Name: \_\_\_\_\_

Tax ID Number: \_\_\_\_\_

#### Company Profile Manager

Name or User ID:

*Enter the Name or User ID of the person to be assigned as Profile Manager. This person must have a valid FDOT account, either ISA or Active Directory (AD).*

Phone Number: \_\_\_\_\_ Phone Type:  Fax  Office  Cell

Phone Number: \_\_\_\_\_ Phone Type:  Fax  Office  Cell

Phone Number: \_\_\_\_\_ Phone Type:  Fax  Office  Cell

Email Address: \_\_\_\_\_

#### Add Another Profile Manager

Name or User ID:

*Enter the Name or User ID of the person to be assigned as Profile Manager. This person must have a valid FDOT account, either ISA or Active Directory (AD).*

Phone Number: \_\_\_\_\_ Phone Type:  Fax  Office  Cell

Phone Number: \_\_\_\_\_ Phone Type:  Fax  Office  Cell

Phone Number: \_\_\_\_\_ Phone Type:  Fax  Office  Cell

Email Address: \_\_\_\_\_

#### Physical Location

Address: \_\_\_\_\_  
Street Address Apartment/Unit #

City State ZIP Code

County: \_\_\_\_\_ Country: \_\_\_\_\_

#### Mailing Address

Same As Physical

Address: \_\_\_\_\_  
Street Address Apartment/Unit #

City State ZIP Code

County: \_\_\_\_\_ Country: \_\_\_\_\_



## Florida Department of Transportation

675-000-05  
07/20  
Materials

### Materials Acceptance & Certification (MAC)

#### Laboratory Qualification/Production Facility Profile (If Applicable)

Forward completed form with a copy of the Accreditation certificate, the last audit of the accrediting agencies and any resolutions thereof to the local District Materials Office.

#### Facility Information

Company Name: \_\_\_\_\_

FDOT Facility Number: \_\_\_\_\_  
Enter the Plant, Mine or Lab Number.

Laboratory Qualifying Agency: \_\_\_\_\_  
AAP, CMEC, NELAC, SMO or OTHER

Consultant  Contractor  Other

#### Facility Manager

Name or User ID: \_\_\_\_\_  
Enter the Name or User ID of the person to be assigned as a Profile Manager for the facility.

Phone Number: \_\_\_\_\_ Phone Type: Fax Office Cell

Phone Number: \_\_\_\_\_ Phone Type: Fax Office Cell

Phone Number: \_\_\_\_\_ Phone Type: Fax Office Cell

Email Address: \_\_\_\_\_

#### Physical Location

Address: \_\_\_\_\_  
Street Address Apartment/Unit #

City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_

County: \_\_\_\_\_ Country: \_\_\_\_\_

#### Mailing Address

**Same As Physical**

Address: \_\_\_\_\_  
Street Address Apartment/Unit #

City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_

County: \_\_\_\_\_ Country: \_\_\_\_\_

Submitted by \_\_\_\_\_ Date: \_\_\_\_\_

### APPENDIX C

