

## Section 8.5 Volume I

### PRECAST PRESTRESSED CONCRETE PLANT CERTIFICATION AGENCY PROGRAM ACCEPTANCE GUIDELINES

#### 8.5.1 PURPOSE

This procedure provides guidelines to the Florida Department of Transportation (Department) personnel who are involved in the review and acceptance of Precast Prestressed Concrete Plant Certification Agency (Agency) programs. The implementation of these guidelines will ensure that acceptable certification programs are used by qualified Agencies to certify the Precast Prestressed Concrete Plants (Plants) that manufacture products for Department projects.

The State Materials Office will perform the review and verification of the applicant Agency's Plant certification program. Upon the acceptance of a new program, the list of the Department's Plant Certification Agencies posted on the State Materials Office website will be modified to include the name and certification program of the Agency.

#### 8.5.2 AUTHORITY

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

#### 8.5.3 REFERENCES

Manual for Quality Control for Plants and Production of Structural Precast Concrete Products, Precast/Prestressed Concrete Institute (PCI) MNL-116

Florida Department of Transportation Standard Specifications for Road and Bridge Construction

#### 8.5.4 DEFINITIONS

**Agency:** A Plant certification Agency that is involved in the precast prestressed concrete plant certification program.

**Agency Inspector:** An inspector who is performing the precast prestressed concrete plant inspections. The purpose of each inspection is to either include a new Plant on the Agency's certified Plants list or to

maintain a previously certified Plant on the list. The Agency Inspector may be a full-time, part time, or contracted employee of the Agency or may be an employee of an engineering firm who is retained by the Agency for the purpose of Plant inspections.

## 8.5.5 SCOPE

Primary Offices affected by this procedure include State Materials Office (SMO), the State Structures Design Office, the Office of Construction, the District Materials Offices, and the District Construction Offices.

## 8.5.6 THE CERTIFICATION AGENCY PROPOSED PROGRAM

### 8.5.6.1 SUBMITTAL OF PROPOSED PLANT CERTIFICATION PROGRAM

The State Materials Office will review submitted details of the Plant certification program. These details include:

- (1) Quality control manual or any other document that is used as a guide for the inspection of Plants and the production of the structural precast concrete products (**Manual**);
- (2) Any other documents describing the details of their certification programs, including, Agency Inspector qualifications, and any other documents as described herein.

### 8.5.6.2 The Agency Plant Certification Documents

The Department will verify that the Agency has used at least one of the following items as a guide in their certification programs:

- (1) The **Manual for Quality Control for Plants and Production of Structural Precast Concrete Products, Precast/Prestressed Concrete Institute (PCI) MNL-116**;
- (2) **Florida Department of Transportation Specifications, Section 450**, including **PCI MNL-116** requirements, and related sections of the Department's **Materials Manual**;
- (3) Any other **Manuals** that cover the same subjects as described in **PCI MNL-116**. **Manuals** from Agencies providing Plant certification programs using their own **Manuals** as guide, in lieu of **PCI MNL-116**, shall include a statement indicating that the contents of their **Manuals** are equivalent to the contents of the

**PCI MNL-116** and that they cover the essential prestressed concrete related issues in sufficient technical detail.

## **8.5.7 STATE MATERIALS OFFICE RESPONSIBILITIES**

### **8.5.7.1 REVIEW COMMITTEE**

The Director, Office of Materials, forms a Review Committee (Committee) to review an Agency's submitted certification program, including a **Manual** along with any other submitted documents. The Committee may be composed of State Materials Office employees or other Department employees.

The Committee reviews the contents of the **Manual** and other documents submitted to ensure that they cover, in sufficient detail, the essential prestressed concrete related issues as described in **PCI MNL- 116** or the **Florida Department of Transportation Specifications, Section 450**.

### **8.5.7.2 REVIEW COMMITTEE RESPONSE TIME**

Within one month of the program submittal, the Committee will respond to the Agency by providing written comments related to the Committee's review of the Certification Agency Program.

### **8.5.7.3 CERTIFICATION AGENCY PROGRAM**

The Committee will review the Agency certification program to ensure that it meets the requirements of the checklist, as described herein:

- (1) The Agency inspection program includes the **Manuals**, qualifications of Agency Inspectors, and frequency of inspections. The Agency submitted documents are in substantial compliance with cover the general contents of **PCI MNL-116** or the **Florida Department of Transportation Specifications, Section 450** and related sections of the Department's **Materials Manual**.
- (2) The **Manual** and other submitted documents describe the certification program, including a review of the Plant's quality control plan, initial and routine inspections and issue of certificates.

- (3) The **Manual** states that the Agency reviews the Plant's quality control plan and approves it based upon a satisfactory review of the document and satisfactory results of the Plant inspection.
- (4) The **Manual** has described the inspection schedule including an initial inspection and routine unannounced Plant inspections by qualified Agency Inspectors.
- (5) The **Manual** describes the closeout meeting with the representatives of the Plant's quality control, production, and management personnel to address the Plant's deficiencies at the end of each inspection.
- (6) The Agency Inspectors possess one of the following types of qualifications:
  - (A) **PCI Quality Control Personnel Level III Certification** or its equivalent and a minimum of 10 years of precast/prestressed concrete related experience;
  - (B) A Florida Professional Engineering license, and **PCI Quality Control Personnel Level III Certification** or its equivalent and a minimum of 5 years of precast/prestressed concrete related experience.
- (7) The Agency staff includes a designated Professional Engineer who is not involved in any business related functions of the Plant and has the design or construction experience in the field of precast/prestressed concrete. The designated Professional Engineer periodically reviews the inspection reports of the randomly selected Plants each year, recommends plans for future improvement and modification of the **Plant Certification Program**, and reviews any appeals that the Agency may receive from the Plants related to the performed inspections.
- (8) The Agency Inspectors are not employed by or involved in any business related functions of the Plants.
- (9) The **Manual** describes the Agency's follow-up policy regarding the correction of any deficiencies noted during the inspection process. The follow-up policy requires that non-critical deficiencies be corrected within 30 days of receiving the inspection report, and critical deficiencies be corrected immediately. If the Plant deficiencies are not corrected within the required time period, the Plant certification will be suspended. The **Manual** shall address the reinstatement

- (10) Process of the suspended Plant certifications. The certification program shall include notification by the Agency to the Department of certification/suspension when a Plant is involved in the manufacturing of products for Department projects.
- (11) The program includes the Agency performing at least two annual unannounced inspections and any other additional inspections when needed to review the Plant's repeating deficiencies.
- (12) The Agency does not issue conditional certification to a Plant.
- (13) The Agency maintains a current listing of their certified Plants on the Agency's website. The list includes the category and group of products that a Plant is certified to produce.
- (14) The **Manual** describes methods for Agency Inspectors during each inspection at each Plant to perform a review of the design plans, shop drawings, and specifications of a project; and observe the entire fabrication cycle of a product. The Agency Inspector observations include the review of materials, production methods, product handling, storage, appearance, quality control inspection and testing, record keeping, and personnel training.
- (15) The Agency program includes a policy statement that the Agency will respond to Department requests for information regarding the Plant certification/suspension status within three (3) days of the receipt of the request.
- (16) The **Manual** includes sample forms showing the inspection items and contract between the Agency and Plants that are being inspected.
- (17) The **Manual** states whether the Agency Plant inspection program is national or international and provides additional information if their inspection program is limited to a specific geographical area within or outside of the United States.

#### **8.5.7.4            RESPONSES TO REVIEW COMMITTEE'S COMMENTS**

Upon the receipt of the Committee's review comments, the Agency will provide a written response to the Committee's comments. The Committee will review any details of the Agency's modified certification program presented as well as the written responses. The Committee will schedule a face-to-face meeting with the Agency and other Department representatives, including representatives from the State Structures Design Office and Office of Construction.

#### **8.5.7.5            COMMITTEE RECOMMENDATION**

The Committee recommends to the Director, Office of Materials, the acceptance or rejection of an Agency's certification program. The Director, Office of Materials, will inform the Agency of the acceptance or rejection of their Certification Program.

#### **8.5.7.6            PLANT CERTIFICATION AGENCIES**

The State Materials Office will post the name of the Agency and the title of their Department accepted certification program on its website under the State Materials Office's list of the Plant Certification Agencies.

#### **8.5.8              TRAINING**

The Review Committee members shall be familiar with the ***Manual for Quality Control for Plants and Production of Structural Precast Concrete Products, Precast/Prestressed Concrete Institute (PCI) Manual MNL-116*** and ***PCI Plant Inspection*** process. At least one member of the Committee shall have a current ***PCI Quality Control Personnel Level III Certification***. At least one of the Committee members shall possess a current Florida Professional Engineering license.

#### **8.5.9              FORMS**

There are no forms associated with this procedure.