

1050807 CONTRACTOR QUALITY CONTROL GENERAL REQUIREMENTS CONCRETE  
QC PERSONNEL  
COMMENTS FROM INDUSTRY REVIEW

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Comments:

The Level II inspectors of the precast concrete plants have enough knowledge to be batch plant manager without taking the batch plant operator course. Therefore, in Item C of 105-8.7.4 Concrete Production Facility Manager for Quality Control: Delete the "Plant Operator" and revise the sentence to read: c. Precast Concrete Pipe, Box Culverts, Drainage Structures, or Incidental Precast Concrete Plants Level II Quality Control Inspector Certifications meeting the requirements of 105-8.11.

Response:

Agree. Change made. This language will be moved to MM 9.2 Vol II for January 2011 implementation.

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Comments:

The Section 105 quality control personnel specifications are becoming overly complicated to understand. For example, precast concrete pipe and box culvert QC personnel requirements were established several years ago in Section 105-8.11. The recently proposed Section 105 changes propose to add precast concrete pipe and box personnel requirements in an entirely different section, namely 105-8.7. We recommend containing all requirements for a specific product type in one section, if possible.

1. Specifically regarding proposed Section 105-8.7.4, how does the Department define a "Concrete Production Facility Manager for Quality Control Production?"
2. Does this title refer to the overall plant facility manager or to the plant QC manager? Please verify the intended subject of the proposed Section 105-8.7.4 requirements.
3. If the subject is the QC manager, then please explain how these proposed changes will affect the current Section 105-8.11.1.3, which established qualification requirements for the Plant Quality Control Manager for a precast concrete pipe or box culvert facility.
4. Our understanding of the proposed Section 105-8.7.4 is to establish 4 qualifications, which are enumerated 1 through 4 in the proposed specification. In lieu of qualification item 1, the "Production Facility Manager for Quality Control" may alternately have any one of sub-items

a, b, or c. Specifically, sub-item c is confusing, in particular the phrase “Plants Batch Plant Operator.” We recommend eliminating that phrase and re-wording sub-item c as “Precast concrete pipe, box culvert, drainage structures, or incidental precast concrete plant Level II Quality Control Inspector Certification meeting the requirements of Section 105-8.11.1.2.”

Response:

1. The proposed changes will not affect the qualification requirements of the quality control personnel of the precast concrete plants, as described in 105-8.11. Instead, it allows the qualified Level II inspectors, meeting requirements of Section 105-8.11, to serve as batch plant managers of concrete production facilities (Concrete batch plants). Those who meet the requirement of PCI Level III, NRMCA Level II, 105.11 Level II will be allowed to serve as batch plant manager (concrete production facility manager) of the concrete batch plants (Concrete production facilities), provided that they have 3 years of experience.
2. No, this title is only related to the manager of the concrete batch plant (Concrete production facility). The precast concrete quality control manger is described in 105-8.11. There is no requirement in 105-8.11 or 105-8.7 for the Manager of the entire Precast Concrete Plants. Section 105-8.11 is only related to qualification requirements of quality control personnel of precast concrete plants.
3. The proposed changes do not affect the requirements of 105-8.11.1.3. Instead, it allows the Level II quality control manager to serve as the manager of concrete batch plants (concrete production facility), if he/she has three years of experience and meet other requirements as described in 105-8.7.
4. Agree. Change made. This language will be moved to MM 9.2 Vol II for January 2011 implementation.

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Comments:

1. I think it (105-8.7.3.2) needs to include the same wording as in the section above (105-8.7.3.1) (Duties include final curing, compressive strength testing, and the recording/reporting of all test data).
2. Why are we holding QC to a level that V is not held to. Nowhere does it state that in the Verification facilities do they have to have a Concrete Lab level II to oversee the testing.

Response:

1. 105-8.7.3.1 defines the qualifications for the person performing the compressive strength tests and the subarticle lists the duties associated with the tests. 105-8.7.3.2 defines the qualifications for the supervisor of the person performing the compressive strength tests. The duties do not need to be listed in 105-8.7.3.2. No changes made.

2. Quality Control and Verification testing personnel are held to the same requirements. The requirements are provided in separate documents. Section 105 is addressed to the Contractor for Quality Control personnel requirements. The requirements for Verification personnel are defined in CTQM Chapter 4, which addresses all levels of testing. No changes made.

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Timmy Meeks  
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Comments:

1. I think there needs to be some clarification to what test results you are referring to in 105-8.7.3.2.

2. In 105-8.7.3.2, why are we holding the QC to a level that verification is not held to? We are requiring the QC to be supervised by a Concrete Lab level II technician. I am not aware of a spec where it states that in the verification facilities they are required to have a Concrete Lab level II technician oversee the testing.

Response:

1. Agree. "Hardened property" has been added to clarify.

2. See above response for verification and qc requirements.

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Greg Vickery  
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Comments:

1. 105-8.7.2 Concrete Field Technician Inspector Level II According to 1-3 Definitions, an Inspector is "An authorized representative of the Engineer..." Question: Is it appropriate to call the Contractor's employee an Inspector? Is the CEI required to have this qualification?

2. 105-8-7.3.2. Question: All labs that do business with the Department provide tests results to the Department. Is it appropriate to require all labs that break cylinders to have a Level II Technician? Concrete Lab Level II is a lengthy qualification to get and not many people have it.

Response:

1. The change from technician to inspector is to be consistent with the CTQM Chapter 4. The definition of inspector will be reviewed with the State Construction Office and State Specifications Office and the definition will be modified if needed. No changes made.

2. The requirement for a Lab Level II has been in CTQM Chapter 4, but was not specifically addressed in Section 105. This is not a new requirement, but is a clarification of an existing requirement. No changes made.

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Comments:

Comment by Jeanie Kozak of D5 Materials & Research on a new section added Section 105-8.7.3.1.

Concrete Laboratory Technician – Level II- This section says to ensure that laboratories providing test results to the Department are under the supervision of a CTQP Concrete Laboratory Technician – Level II. How will this be enforced? Will this be a requirement of Laboratory Qualification? FDOT Laboratory Qualification is based on the accreditation of qualifying agencies that do not enforce this requirement. CMEC and AMRL accredits laboratories based on AASHTO R 18 and ASTM C 1077 and neither of those standards contain that criteria. The only criteria specified for supervising laboratory technicians is a minimum of 3 years relevant experience and current technician certification of relevant tests (per ASTM C 1077; section 6.1.2).

Response:

See response to Greg Vickery regarding Lab Level II. When lab inspections are performed, the lab personnel should be assessed in accordance with the requirements of CTQM Chapter 4 and the requirements of the ASTM C 1077. No changes made.

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Comments:

1) I thought all concrete techs on any bridge had to be Level II? The size of the bridge doesn't matter anymore?

Response:

From the State Specifications Office: A change was proposed for the January 2010 Workbook that required a Level II on any bridge, but that change was placed on hold and not implemented.

2) Why does a Level 2 inspector have to notify the Verification Technician on the size of the Lot and when a pour is to be made? Why doesn't the Level 1 also have this responsibility? Or should the Verification Technician take his lead from the Project PA on the job. Shouldn't the responsibility for notifying the VT be the same for both levels of inspectors?

Response:

From the State Specifications Office: In subarticle 105-8.7.2, the term “technician” is being changed to “inspector” to be consistent with CTQM Chapter 4. This comment is outside the scope of the proposed changes and should be discussed with the State Construction Office for possible changes.

3) The CTQP title of the QC personnel in all documents referring to this position is “Concrete Field Technician - Level X”. Why are we asking to change it to “Inspector” in 105-8.7.2 but not in 15-8.7.1? Additionally, the title “Inspector” is usually given to Department VT personnel. This should not be changed.

Response:

The Qualification title for Level II has been revised in CTQM Chapter 4 to “inspector.” These changes will make the terms consistent. See above response for language related to the definition of inspector.

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