

Specification Section 105

Subarticle 105-4

ORIGINATION

Date: 6-15-26

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COMMENTARY

The current maximum compressive-strength requirement is an indirect and imprecise way to limit excessive cementitious content and control shrinkage cracking, that has impacted construction schedules in a negative manner.

INDUSTRY COMMENTS AND RESPONSES

(Please note all comments and responses are verbatim as received. The Specifications Office does not alter typos or grammar.)

BLACK = Comment **BLUE** = Specifications Response **GREEN** = Change Made to Specification

Name: Michael Davy

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Date: 8-12-26

COMMENT: Regarding the following :When a higher class is substituted for Class I Pavement or Class II Bridge Deck, the substituted mix design must satisfy the paste volume and drying shrinkage limits applicable to the specified class. The Engineer may waive the paste volume and drying shrinkage requirements for the substituted mix when project-specific conditions such as the need for accelerated strength gain justify the use of a higher class mix.

This will become an issue and should be reconsidered, as we do not always know that a substitution is being made of a higher class of mix-so we may not meet the paste volume and drying shrinkage limits of the specified class.

RESPONSE:

Thank you for the comment. A few points of clarification on how the provision is intended to operate:

Substituting a higher class is a contractor election, not a producer decision. The obligation to furnish a mix meeting the requirements applicable to the specified class rests with the party requesting the substitution. The waiver provision is available where project conditions such as accelerated strength gain justify it.

ACTION TAKEN:

NA

Name: Joseph P Conover

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Date: 8-17-26

COMMENT: Section 9.2.5 : What will be the scope and participation requirements of the QC Manager. Will the remote audits be in conjunction with the current 3 month inspection cycle that is required now?

Section 9.2.7.1 Table 1: Question #1-With the new paste volume and drying shrinkage requirements for Class I Pavement and Class II Bridge Deck, will the current approved mixes being used on current projects be acceptable for the length of the projects they are being used on if they don't meet the new requirements?

Section 9.2.7.1 Table 1: Question #2-Can mix designs that were hibernated due to the maximum strength specification be reactivated for use? Purpose is to reduce or eliminate repetitive trial batching and material substitution requests.

RESPONSE:

Thank you for the comments. Responses below.

9.2.5, QC Manager scope and audit frequency

Remote audits are not in addition to the three month cycle. They are an alternative format for a portion of those inspections. Actively producing plants remain on a minimum three month inspection frequency, and at least one inspection per year must be conducted in person. Whether a given inspection is remote is at the discretion of the District Materials and Research Engineer, and only where the criteria in 9.2.5 are met, including an on-site inspection within the preceding year.

The QC Manager's role in a remote inspection is participation and documentation. The QC Manager must be agreeable to the remote inspection format, take part in the inspection, prepare the supporting materials, and provide inquiry responses and documentation in a suitable electronic format by the requested date. The intent is to provide an opportunity to shift the format of the inspection, not to add scope beyond what the QC Manager already prepares for an on-site visit.

Table 1, Question 1, existing approved mixes

Mix designs currently approved meeting the maximum allowable compressive strength criteria before the effective date of this revision remain approved and may continue to be used, including on projects currently under contract. The paste volume and drying shrinkage requirements will apply to new mix design submittals and to revisions of existing mix designs after the effective date.

Table 1, Question 2, hibernated mixes

The maximum strength provision is removed in this revision, so the basis for those hibernations no longer applies. Nearly all of hibernated mix designs were approved more than five years ago. For those, the strength data is no longer representative and a new trial batch will be required regardless of the paste volume and shrinkage requirements. For mixes approved within the last five years where the constituent materials remain approved and unchanged, reactivation without repeating the trial batch is our intent. Mixes classified for Class I Pavement or Class II Bridge Deck will need a paste volume calculation, and drying shrinkage data per AASHTO T 160 where the paste volume limit is exceeded. That testing was not required when those mixes were originally approved, so the data will not be

on file.

ACTION TAKEN:

NA