samples, and (4) equipment calibration to cover the testing equipment.

Laboratory Qualification

Four commenters supported the proposed requirements for laboratory qualifications.

Eight commenters expressed concerns about the requirements for laboratory qualifications. The NPRM proposed to include by reference two paragraphs from the "Standard Recommended Practice for Establishing and Implementing a Quality System for Construction Testing Laboratories" (R-18) published by the AASHTO in the "Standard Specifications for Transportation Materials and Methods of Sampling and Testing." The commenters believed that R-18 was not appropriate for field laboratories. It was not the FHWA's intent that the entire R-18 standard be used for the qualification of field laboratories. Due to the confusion caused by specifying only a part of R-18, the rule has been revised to specifically list the minimum requirements for field laboratories and delete the reference to R-18.

Eight commenters wanted clarification of the requirements for accreditation of the SHA central laboratory. It is the intent of the FHWA that the accreditation program must meet the guidelines in ASTM E-994. In addition to the guidelines in ASTM E-994, we have two additional concerns: First, regarding the acceptability of the assessors; and second, concerning the scope of the on-site assessment. For an accreditation program to be acceptable to the FHWA, the assessor must be employees of the accrediting body and not employed by a laboratory which may compete for work with the laboratory being assessed. This would avoid any potential conflicts of interest. In addition, the on-site assessment must include a detailed review of the test procedures in which the laboratory is being accredited. The FHWA believes that only one laboratory accreditation program currently meets the above concerns, and that is the AASHTO Accreditation Program. As we understand the operating procedures of other accreditation programs, they allow reviewers to be employees of other testing laboratories and do not require the laboratory to demonstrate all the tests in which the laboratory is being accredited. If other accreditation programs can satisfy our concerns, we will approve them. Any inquires or requests for approval should be directed to the FHWA's Office of Engineering.

Six commenters expressed concern about the cost and implementation time necessary for accrediting an SHA central laboratory. The commenters believe that two years is too short a time in which to become accredited. At this time 30 SHAs are accredited by the AASHTO Accreditation Program (AAP). The FHWA contacted the AAP to obtain data on the average length of time required by the AAP to accredit a SHA laboratory after receipt of an application for accreditation. Based on the information supplied by AAP, the FHWA believes that two years is an adequate lead time for obtaining accreditation. The requirement for accreditation replaces the inspections by the National Reference Laboratories which are required by §637.205 of the current regulation. The actual cost of accreditation to the SHA is the same as the cost of inspection program that it replaces. However, there will be some costs associated with developing the quality system for the initial accreditation for the SHAs. The rule provides flexibility to the SHAs to designate private laboratories to perform independent assurance tests and dispute resolution testing. Since the SHAs must review the qualifications of designated laboratories, the SHAs need to be qualified at the highest level, which is accreditation. Therefore, this final rule maintains the laboratory accreditation requirements as originally proposed.

Definitions

Four commenters suggested changes to the definition of quality control. The definition of quality control was adapted from the definition in ANSI 90 and ISO 9000 which are the industry consensus standards for quality assurance. Therefore, the FHWA is retaining the definition as proposed.

Two commenters wanted to delete the word "accredited" from the definition of "qualified laboratories". There appears to be confusion over the use of the term "accreditation" since the NPRM used the word to describe two different levels of qualifications. The FHWA agrees with the comment because of the apparent confusion. The word "accredited" has been removed from the definition of "qualified laboratories".

Two commenters wanted clarification of the term "vendor." A definition of "vendor" has been added to insure that it includes suppliers of projectproduced materials. It was the FHWA's intent that the rule cover only projectproduced materials and not manufactured materials.

One commenter suggested changes to the definition of "quality assurance". The definition of "quality assurance" was adapted from the definitions in the ANSI 90 and ISO 9000 standards which are the industry consensus standards for quality assurance. Therefore, the FHWA has retained this definition as proposed in the NPRM.

One commenter suggested requiring random sampling. The FHWA agrees with the comment. In order for test data used in the acceptance decision to be properly analyzed, samples must be obtained on a random basis. Section 637.205(e) has been added to require random sampling.

One commenter was concerned with the wording of the definition for IA, which the commenter interpreted as requiring the IA to be performed by a consultant. As stated earlier, it is the FHWA's intent that the States have the option to perform IA sampling and testing themselves or have a qualified designated agent perform the testing. The definition in the final rule has been revised to reflect our intent.

Miscellany

Eight commenters requested a delay in issuing a final rule. Their major concern was over potential conflicts between this final rule and AASHTO's effort to develop guide specifications for Quality Assurance. The AASHTO effort is related to this rulemaking. However, the "AASHTO Quality Assurance Guide Specification" and the "AASHTO Implementation Manual for Quality Assurance" are in the draft stage and are still being reviewed. It may be some time before these documents receive full endorsement by AASHTO. Since the current regulations do not address the practice of using contractor testing in making acceptance decisions, the FHWA believes that it is necessary to proceed with the final rule. The commenters were also concerned that the SHAs did not have adequate time to comment on the regulation. The NPRM provided a 60 day comment period. All comments that were received by the FHWA, including the eleven received after the closing of the comment period, were considered and included in the analysis. In addition, the FHWA received comments from 35 of the 52 SHAs. Therefore, the FHWA believes that adequate time was provided.

Five commenters provided comments on the dispute resolution system. There were comments on both sides of the issue of whether the dispute resolution system should allow third party involvement. Three commenters were in favor of keeping the system in the State; two were in favor of using third parties. In the NPRM the FHWA proposed to permit the SHAs to determine how they wanted to set up the dispute resolution system. The FHWA is aware of cases where a dispute resolution system has