

FHWA Qualification Requirements for Laboratories

NACLA Forum

February 11, 2009

Mike Rafalowski

Materials Engineer

Office of Pavement Technology

Federal Highway Administration

Outline

- Requirements in 23 CFR 637
- Requirements for qualified laboratories
- Requirements for accredited laboratories
- Need for Comparable Accreditation Program
- Criteria for comparable accreditation programs
- Significance
- Status

Requirements in 23 CFR 637.209

- Laboratories performing tests used in the acceptance decision are required to be **Qualified**.
- The State Central laboratory and third party laboratories performing dispute resolution and Independent Assurance testing are required to be **Accredited**.

Requirements for Qualified Laboratories

All laboratories that perform testing for use in the acceptance decision - including QC

- Required to have calibration records
- Qualification Program approved by FHWA
- **NOT REQUIRED TO BE ACCREDITED**

Requirements for Qualified Laboratories

23 CFR 637 Non-Regulatory Guidance

- Personnel: Supervisors 3 years experience
- Technicians qualified
- Calibration of equipment
- Procedure and test manuals
- Proficiency testing
- Evaluation cycle 2 to 3 years
- Use of IA data

Requirements for Accredited Laboratories

- DOT Central laboratory
- Third party laboratory used for Dispute Resolution
- Third party laboratory used for Independent Assurance

- AASHTO Accreditation Program or Comparable program Approved by FHWA

Need for Comparable Accreditation Program

- Regulatory option for approving comparable Accreditation Bodies
- Inquiries by Accreditation Bodies
- Interest by laboratories in reducing number of duplicative audits

Need for Comparable Accreditation Program

Why NACLA?

- NACLA's mission is to coordinate and evaluate accreditation programs in the US
- Several accreditation programs covering construction materials in the US
- Most parties interested in construction materials are members of NACLA

Criteria for Comparable Accreditation Program

NACLA - Technical Requirements Committee Subcommittee on Construction

- Representatives of : FHWA, FAA, COE, USBR, NIST, AASHTO, AAP, A2LA, NVLAP, IAS, ACIL
- First meeting May 13, 2001
- *Technical Requirements for Construction Testing*, NISTIR 7012, published June 2003

Criteria for Comparable Accreditation Program

Covered under *Technical Requirements for Construction Testing*

- Detailed observation of 100 percent of the test procedures
- Verification of Test Equipment
- Assessment of laboratories against 17025 and additional requirements
- Use of check sheets

Criteria for Comparable Accreditation Program Laboratory Accreditation Program Approval

- Federal Register Notice, September 22, 2004
 - NACLA Recognition Requirements
 - *Technical Requirements for Construction Testing*, NISTIR 7012
 - ABs Evaluated to both criteria - include NISTIR 7012 in scope
 - Laboratories Evaluated according to both criteria – include NISTIR 7012 in scope
- UNDERLYING REGULATIONS NOT CHANGED

Criteria for Comparable Accreditation Program

Expected Steps for Evaluation of Accreditation Program

- Establish a program that meets NISTIR 7012
- Operate program
- Request evaluation of program
 - Evaluation team potential members
 - Federal agencies including FHWA
 - Other users
- Receive recognition of program

Significance

- Consolidate requirements of several Federal agencies
- Potential for some reduction in number of audits for laboratories
- Allow several agencies to use NACLA recognized ABs which currently do not

Status

- NACLA/ACIL developed a comparison document for laboratories
- Interest by one accreditation body