

April 20, 2017

## **PROCEDURES RELATED TO CORRECTIVE ACTIONS**

The Quality Control Manager will have the overall responsibility for all corrective actions related to internal audits, customer complaints, equipment (calibrations, standardizations, checks and maintenance), external assessments (AASHTO re:source and CCRL on-site inspections) and proficiency sample programs. The technical manager and/or laboratory supervisor will have the responsibility to investigate the root cause of any poor results, determine the appropriate actions necessary, and to implement and document the corrective action. The technical manager and/or laboratory supervisor will notify the QC Manager of the results of any corrective actions taken and provide a copy of the documentation for said action.

A poor on-site inspection result is any result that is classified as a deficiency. The procedure for evaluating poor results starts with a root cause analysis and finishes with follow up. An evaluation will be conducted as follows:

The procedure for apparatus deficiencies is as follows:

- Determine if the equipment meets specification requirements.
- If the equipment is found to be defective, take necessary steps to repair or replace it.
- Record the results of the investigation and any corrective action taken.

The procedure for procedural deficiencies is as follows:

- Discuss each procedural deficiency with the testing technician and review the proper procedure.
- Observe the technician perform the test properly.
- Record the action taken.

The procedure for quality system deficiencies is as follows:

- The Quality Manager will review each deficiency cited by the evaluation with the responsible employee.
- Take appropriate action.
- Record the action taken.

The QC Manager will, within ninety (90) days of the issuance of the formal inspection report, provide AASHTO re:source with satisfactory evidence that all deficiencies noted were either corrected or that action has been taken to correct deficiencies. Evidence will consist of the memorandums of record and other records as necessary.

A poor proficiency sample program result is any result that is beyond two standard deviations from the average value (a rating of two or less). The procedure for evaluating poor results starts with a root cause analysis and finishes with follow up. An evaluation will be conducted as follows:

- Determine if the test results obtained were properly transferred to the data sheet and the data was correctly entered into the database.
- Determine if all calculations leading to the test results obtained were correct.
- Determine if the equipment used to perform the test meets specification requirements and was calibrated or verified.
- Determine if the procedures followed were from the correct specification and when performing the test conformed to the specification requirements.
- Take corrective action to repair or take steps to replace defective equipment to instruct the technician of the correct procedure to follow.
- Record the results of the investigation, identifying the cause of the poor results, if determined, and describing any corrective action taken.

The QC Manager will, within sixty (60) days of the issuance of the proficiency sample program report to provide AASHTO re:source a copy of the memorandum summarizing the results of the investigation.