## **Oklahoma Department of Transportation**

Acceptance Testing of Contract Materials
Construction Control Directive No. **19970317** 

February 15, 2002

Scope:

To identify the procedure for addressing failing acceptance tests, accepting materials in which the acceptance testing has been waived and, for addressing independent assurance tests which do not compare favorably with the associated acceptance tests.

## Acceptance Testing

The Resident Engineer is responsible for acceptance testing, which includes inspection and identification of pretested, certified or brochure items. Every effort should be made to obtain-as a minimum-the number of tests specified in the Frequency Guide Schedule for Sampling and Testing Acceptance.

Occasionally a test will be lost or, due to oversight-not performed. The contract's Material Certification must address any and all failing or missing acceptance tests and any other testing shortfalls which may be experienced on a project. Actions which may be documented on the contract's Material Certification include: waiver of the testing for the material, removal and replacement of the failing material or, payment for the failing material at a reduced price equitable with the deficiency.

## Testing Waivers

One of the actions that you may take with regard to failing tests or lack of testing, is to waive the tests-or the portion-that has failed or is lacking. <u>A limit has NOT been set on the amount of testing that may be waived</u> however, the amount of testing waived will continue to be monitored by the Construction Division and Materials Division.

All test results should be analyzed utilizing good engineering judgement. Keep in mind that the Resident Engineer's responsibility is to ensure that quality materials are used in the construction. The following issues may be considered when determining if testing waivers are the appropriate course of action:

 After the project or work unit is complete, there is no value to testing lots of material that will not be incorporated into the project just to acquire the appropriate number of tests.

- Almost all materials can be tested after they have been placed. If testing is lacking-before any funds are spent to verify quality-the use of the material should be evaluated to see if the actual application will receive stresses or if it is more ornamental.
- On occasions where work is performed on items which are used for a temporary basis during the course of a project, consideration may be given to waive failing tests when the contractor has maintained this item to fulfill its temporary need. An exception to this would be when the failing tests and subsequent failure of the work caused the Department or project to incur additional costs which would not have occurred had this material and workmanship been successful.
- Some manufacturers of items such as "stick-down" traffic stripe tape put
  more tape on the roll than what is reflected on the invoice. This is done
  to ensure a "full measure" of what is purchased. Field measurements will
  almost always result in a greater amount than what is included in the
  test report. The amount measured should be paid. The portion not
  covered by test report should be waived.
- When a material item has been supported by several passing tests and it
  is found that some of the material is not covered by tests and there is no
  other evidence that the portion not covered is any different than the
  portion tested-a waiver should be considered.
- There are cases when all of the tests are present, the material is marked as tested, but due to damage during delivery or other reasons the material is not acceptable for use in the work and should be rejected.

## **Independent Assurance Testing**

Independent Assurance Testing is done by the Materials Division to verify the testing performed by the Residency or other outside entities performing acceptance testing for the Department. Independent Assurance Testing is not intended to be used for acceptance and should only be used as such when there is no other alternative.

Failing Independent Assurance Tests (IAT) need to be addressed in the contract's Material Certification only if they do not compare favorably with

the associated acceptance test performed by the Residency. IAT's that do not compare favorably with the associated acceptance tests should be noted and an evaluation process should be initiated to determine if testing procedures or testing equipment require adjustment.

George Raymond, P.E. Construction Engineer