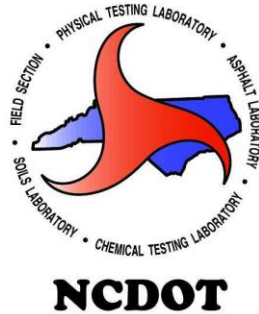


# Materials & Tests Unit



## Standard Operating Procedure Ready Mix Annual Facility Audit

### **Objectives:**

- The purpose of the Annual Facility Audit is to ensure that Ready Mix facilities are operating and documenting operations which meet NCDOT standards, and are capable of producing NCDOT approved concrete.
- Audits shall be performed a minimum of once per year, unannounced, and recommended during a NCDOT production.

### **Materials Inspection and Acceptance:**

The review of documentation and collection of samples will confirm the facility meets all NCDOT standards, and is in compliance with all Materials and Tests policies.

### **Safety Equipment List:**

Safety Vest  
Hard Hat  
Steel Toe boots  
Eye and ear protection  
Gloves for collecting samples

### **Safety Concerns:**

Personnel should be aware at all times of functioning equipment and machinery. Review all safety guidelines required by the facility.

### **Required Sampling:**

Cement – one gallon (plastic bag)  
Fly Ash – one gallon (plastic bag), sample is to be submitted to chemical and physical lab  
Fine Aggregate – one bag (25 – 30 pounds)  
Coarse Aggregate – one bag (25 – 30 pounds)  
Water – ½ gallon (one wide mouth jar)  
Samples should be submitted to Chemical and Physical Laboratories with appropriate sample cards.

### **M&T Inspector's Audit:**

- Verify 3<sup>rd</sup> party facility certificate with expiration date is on site.
- Verify 3<sup>rd</sup> party inspection report (complete report/check list performed by 3<sup>rd</sup> party) is on-site.
- Verify 3<sup>rd</sup> party inspector has been certified by CRMCA.
- Verify facility manager is sending all 3<sup>rd</sup> party inspection documentation to M&T (see Annual Facility Audit Field Book).
- View and verify facility is utilizing NCDOT approved mix designs.
- View and verify certification of all on-site NCDOT Concrete Field Technicians. Technician certifications must be active.
- View and verify certification of all on-site NCDOT Concrete Batch Technicians. Technician certifications must be active.
- View and verify approved materials (cement, fly ash, aggregate, admixtures) per approved mix designs.
- View and verify on-site approved trucks (new list is to be generated every year- kept on-site).
- Verify documentation regarding the performance of moisture tests on fine and coarse aggregates.
- Verify the Certified on-site Batching Technician has the ability to adjust moisture during the batching process (review of batch tickets and/or operating process is acceptable).
- View sample of associated NCDOT documentation (903, 250, copies of batch weights, etc) is completed for every NCDOT production of concrete.

### **Standards:**

NCDOT Standard Specifications For Roads And Structures

NCDOT Materials and Tests policies and procedures

### **Sample Prep And Submittal:**

Sample containers shall be handled to avoid contamination during the sampling, log-in, and transportation process. Sample cards shall be fixed to their corresponding sample container and transported to the appropriate laboratory for analysis.

Samples shall be entered utilizing the HiCAMS system - see Annual Facility Audit Field Manual for entry examples.

### **Documentation Submittal:**

- Complete the “2015 Ready Mix Concrete Annual Facility Audit Checklist” (located on the S-drive), and send to Shannon Burns. This documentation can be submitted via electronically, faxed, or hard copy sent by mail.
- Complete the “2015 Ready Mix Facility Ownership Update” form (located on the S-drive), and send to Shannon Burns. This documentation can be submitted via electronically, faxed, or hard copy sent by mail.