

CONCRETE PLANT RECORDS

MINIMUM REQUIREMENTS

1. The contractor/material supplier shall keep a **record of all tests and inspections performed** at the plant by QC personnel. The records shall be kept current and shall be readily available at the concrete plant for review at any time by TDOT personnel and/or FHWA representatives. It is required that a file cabinet or other suitable filing system be maintained at the concrete plant with this information and documentation.
2. **A process control plan shall be posted** in plain view at the plant location. This process control shall include all TDOT or ACI qualified Concrete Class 2 or higher technicians employed by the concrete supplier that may be responsible for any concrete testing, plant operations or any changes involving concrete mixing. A copy of the Concrete Class 2 or 3 certification for these personnel should be available upon request at the plant.
3. **The material supplier shall meet the requirements of specification 921.01 and maintain testing data readily available upon request of TDOT and/or FHWA representatives.**
4. **Gradations on fine and coarse aggregate (including fineness modulus tests)** shall be maintained in a file at the concrete plant location. According to the minimum requirements of the specifications a gradation must be run weekly or every 1500 C.Y. for 501 Items and every 500 C.Y. for 604 Items.
5. **Checks on accurate weightings** of aggregates, cement, fly-ash, water and admixtures shall be maintained in the records at the plant site. Scales shall be inspected and checked as often as the Engineer may deem necessary to assure their continued accuracy. The scale checks must be recorded and documentation of this shall be retained in the project files at the plant.
6. **Moisture checks and calculations** shall be made on stockpiles before any batching of materials. These checks can be made by the use of moisture probes or other means but this information must be recorded and the documentation retained in the project files at the plant. At least, one (1) check shall be made in the A.M. and one (1) check in the P.M.
7. **Calculated corrections or adjustments made for water withheld or added** shall be recorded. If ice is used, the calculations shall reflect this adjustment in the batching information. All batch tickets must reflect these adjustments also. Retain documentation of these adjustments in the plant files.
8. An **initial slump, air and temperature of the concrete** shall be made from the first truck to be loaded out for delivery to the job-site. If a deck pour is involved, the first three (3) loads should be checked to ensure each load complies or it may be rejected at the job-site for failure to meet specifications (refer to SOP 4-1). Water added for the placement site for Class D and Class L cannot exceed one gallon per cubic yard. The total water in the mix including aggregate moistures shall not exceed water/cement ratio of .04 any additional slump shall be achieved with a water reducing admixture. Any check for slump shall be more than a visual check. An actual slump tests shall be performed. Random checks on the slump, air and temperature shall continue throughout all concrete pours and be documented. Documentation of this information shall be retained at the plant.
9. Keep **records of delivery tickets** of all materials such as coarse and fine aggregates, cement, fly-ash and all other admixtures and additives used for state projects at the plant site.
- 10 **Record any and all adjustments made to the concrete at the plant.** These records will be maintained at the plant site and given to the Project Supervisor at the conclusion of the project. It shall be the responsibility of the project supervisor to collect this documentation and records at the conclusion of the project.
11. **Truck checks** are to be made on a periodic basis, checking for the blade wear, working revolutions counters, identification plates and water meters. A copy of these checks on the appropriate form (SOP 4-3 attachment #1), must be sent to the Regional Materials & Tests office at least every six (6) months or whenever trucks are added or taken away from the fleet. Trucks not shown on the up- dated list are not to be used on a state project. Post a copy of the active list of approved trucks in a conspicuous place at the concrete plant. Retain historical records of these periodic truck checks in the files at the plant.
12. **A completed plant check by TDOT Materials & Tests** shall be posted in a conspicuous place that indicates the plant meets the specification requirements and is an approved material supplier for concrete.