

Division of Materials and Tests

TDOT Certification: Hot Mix Asphalt Certification Program

Course Title: Hot Mix Asphalt QA/QC Level 2: Plant Technician Certification Course

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Who is required to have this certification?

- The contractor must have a certified Asphalt Plant Technician present at the plant anytime the plant is producing mix to run quality control tests. (Per TDOT Specification 407.03.D.2.a)
- The TDOT inspector at the plant responsible for observing the contractor's quality control and running acceptance/verification sampling/testing shall be a certified Asphalt Plant Technician
- TDOT Materials & Tests employees that will be running the Independent Assurance Testing at the plants.

Course Description

The course covers an overview of asphalt mix materials, asphalt mix plants, sampling and testing for quality control/assurance, pay factors, and TDOT specifications for mix production.

Scope of Course

The course covers plant setup, applicable forms, appropriate calculations, and the following AASHTO and ASTM Test Methods:

- AASHTO T 2 - Standard Practice of Sampling Aggregates
- AASHTO T 11 - Materials Finer Than No. 200 Sieve in Mineral Aggregates by Washing
- AASHTO T 27 - Sieve Analysis of Fine and Coarse Aggregates
- AASHTO T 30 - Mechanical Analysis of Extracted Aggregates
- AASHTO T 84 - Specific Gravity and Absorption of Fine Aggregate
- AASHTO T 85 - Specific Gravity and Absorption of Coarse Aggregate
- AASHTO T 164 - Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
- AASHTO T 166 - Bulk Specific Gravity of Compacted Bituminous Mixtures Using Saturated Surface-Dry Specimens
- AASHTO T 168 - Sampling Bituminous Paving Mixtures
- AASHTO T 209 - Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
- AASHTO T 248 - Reducing Samples of Aggregate to Testing Size
- AASHTO T 255 - Total Moisture Content of Aggregate by Drying

- AASHTO T 308 - Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method
- TDOT Test Method for Stripping (Ten Minute Boil Test)
TDOT Test Method for Coating
- TDOT Test method for Glassy Particles in Slag
- TDOT Test Method for Fractured Face Count for Marshall Mixes
- TDOT Test Method for Loss on Ignition for Surface Mixes

Prerequisites for TDOT Employees

TDOT Employees that are certified as Asphalt Plant Technicians will be responsible for all quality assurance sampling and testing of the asphalt mix at the plant. Candidates for this certification must be trustworthy of this responsibility, have a solid background in mathematics, an understanding of how to read and follow test specifications and have some knowledge of asphalt materials. Employees interested in obtaining certification as a plant tech are encouraged to spend some time at an asphalt plant observing a certified Asphalt Plant Technician to gain some familiarity prior to attending the certification class.

- Completion of Hot Mix Asphalt QA/QC Level 1: Roadway Certification
- One year of service with TDOT
- Supervisor's approval and written recommendation that the candidate is:
 - Trustworthy
 - Capable of arithmetic, ratios, percentages, and fractions
 - Familiar with applicable TDOT Standard Specifications
 - Experienced with the terminology of asphalt paving or plant operations
 - Can read, understand and follow directions

Certification Requirements

- TDOT will grant a 5 year certification only to those applicants who meet the following requirements:
- Attendance of the 5-day course in its entirety
- Successful completion of a 4 maximum hour examination with a passing score of 70% or above (The exam is OPEN BOOK and consists of multiple choice questions)
- After passing the test, complete a successful lab demo for the Regional M&T staff.

Recertification Requirements

- Must attend a ½ day seminar/workshop for updates of any changes to specifications and test methods since certification
- The technician must re-demonstrate within one year of the ½ day seminar/workshop to maintain certification

Study Materials

- [Hot Mix Asphalt Plant Technician Certification Study Guide](#)
- [How to Register](#)

NOTICES:

Cheating on any level of the exam **WILL NOT BE TOLERATED** and will result in immediate expulsion from the course and notification to superiors.

The use of cell phone calculators **WILL NOT** be permitted during exam

A valid **PHOTO I.D. IS REQUIRED** upon check-in