

ALDOT-374-91

CERTIFICATION PROGRAM FOR HOT-MIX ASPHALT TECHNICIANS

1. Scope

- 1.1. This program establishes the compliance requirements for Hot Mix Asphalt (HMA) certifications required for personnel designing, manufacturing, sampling, testing, inspecting, and managing the production and quality control of HMA materials and operations for the Alabama Department of Transportation, herein referred to as ALDOT or as the Department.
- 1.2. The intent of this program is to improve the quality and performance of hot mixes asphalt pavements through knowledge and understanding of the product. This program is applicable to the Department, its consultants, and industry personnel.
- 1.3. This procedure will outline the requirements for five levels of HMA certifications:
 - Roadway HMA Pavement Technician
 - Asphalt Level I Laboratory Technician
 - Asphalt Level II Quality Manager Technician
 - Asphalt Level III Mix Design Technician
 - Contractor HMA Roadway Technician

2. Program Administration

- 2.1. A certification Board (CB) and a Working Task Force (WTF) will administer the certification program.
 - 2.1.1. Certification Board – Membership of the CB will consist of the following:
 - Materials and Tests Engineer, Chairman
 - Deputy Director of Operations
 - Construction Engineer
 - Area Operations Engineer appointed by the Deputy Director of Operations
 - Industry Representative appointed by the Alabama Asphalt Pavement Association
 - 2.1.2. Working Task Force – Membership of the WTF will consist of the following:
 - HMA/Liquid Asphalt Specifications Engineer
 - Assistant Construction Engineer
 - Industry Representative appointed by the Alabama Asphalt Pavement Association

3. Technician Certification Requirements

- 3.1. Roadway HMA Pavement Technician
 - 3.1.1. Required: Department, its consultants, and industry personnel responsible for asphalt pavement construction, delivery, placement, and compaction of HMA mixtures.
 - 3.1.2. Prerequisite: Maintain a current Radiation Safety Technician certification.

- 3.1.3. Training: Successful completion of three-day classroom and laboratory training on asphalt pavement construction, placement and compaction, the use of nuclear gauges to determine densities, and random sampling.
- 3.1.4. Testing: Successfully passing a written or computer based examination administered by the Department with a minimum score of 75. Successfully passing a hands-on examination to demonstrate proficiency to operate a nuclear density gauge and be capable to perform thin layer gauge calibrations.

3.2. Asphalt Level I Laboratory Technician

- 3.2.1. Required: Department, its consultants, and industry personnel responsible for quality control of HMA pavements.
- 3.2.2. Prerequisite: Maintain a current Radiation Safety Technician certification
- 3.2.3. Training: Successful completion of four-day classroom and laboratory training on procedural testing to control the quality of HMA pavements.
- 3.2.4. Testing: Successfully passing a written or computer based examination administered by the Department with a minimum score of 75. Successfully passing a hands-on examination to demonstrate proficiency in testing and performing calculations required to analyze HMA samples in the laboratory.

3.3. Asphalt Level II Quality Manager Technician

- 3.3.1. Required: Department, its consultants, and industry personnel responsible for quality control of HMA pavements and the improvement of HMA mixes by using statistical analysis or changing plant operations.
- 3.3.2. Prerequisite: Maintain current the following certifications:
 - Radiation Safety Technician
 - Roadway HMA Pavement technician
 - Asphalt Level I Laboratory Technician
- 3.3.3. Training: Successful completion of four-day classroom training on procedures to improve HMA mix quality.
- 3.3.4. Testing: Successfully passing a written or computer based examination with a minimum score of 75.

3.4. Level III - Mix Design Technician

- 3.4.1. Required: Department, its consultants, and industry personnel responsible for designing HMA job mix formulas.
- 3.4.2. Prerequisite: Maintain current the following certifications:
 - Radiation Safety Technician
 - Roadway HMA Pavement technician
 - Asphalt Level I Laboratory Technician

- 3.4.3. Training: Successful completion of five-day classroom and laboratory training on testing and designing HMA mixes.
- 3.4.4. Testing: Successfully passing a written or computer based examination with a minimum score of 75. Successfully passing a hands-on examination to demonstrate proficiency on designing HMA job mix formulas that meets Department specifications.
- 3.5. Contractor HMA Roadway Technician
 - 3.5.1. Required: Industry personnel responsible for asphalt pavement construction, delivery, placement, and compaction of HMA mixtures. Industry personnel may also take Roadway HMA Pavement technician .
 - 3.5.2. Prerequisite: Maintain a current Radiation Safety Technician certification.
 - 3.5.3. Training: Successful completion of one day classroom and training on asphalt pavement construction, placement and compaction, and the use of nuclear gauges to determine densities, and random sampling.
 - 3.5.4. Testing: Successfully passing a written or computer based examination administered by the Department or the Alabama Asphalt Pavement Association with a minimum score of 75. Successfully passing a hands-on examination to demonstrate proficiency to operate a nuclear density gauge and be capable to perform thin layer gauge calibrations.

NOTE: The Contractor Roadway Technician certification is only approved for Contractors performing ALDOT work. ALDOT, Consultant, and County inspectors shall be required to maintain a Roadway HMA Pavement Technician certification while performing work on ALDOT projects.

4. Certification

- 4.1. Personnel meeting all the qualifications for any of the Hot-Mix Asphalt Technician certifications will be certified as such upon approval of the Working Task Force.
- 4.2. Certification shall be contingent upon the technician signing BMT-105. Hot-Mix Asphalt Technician certifications are valid for a period of three (3) years provided all pre-required certifications are maintained current.

5. Decertification

- 5.1. Abuse or neglect of the responsibilities of Hot-Mix Asphalt Technician certifications is ground for disciplinary action.
- 5.2. The Working Task Force will investigate all written accusations.
- 5.3. Disciplinary actions will be implemented upon recommendation of the Working Task Force and approval of the Certification Board.
- 5.4. Disciplinary Actions will range from written reprimand to suspension of certification
- 5.5. Suspensions will be a minimum of six months, plus six months probation, to permanent revocation of certification rights.
- 5.6. Falsification of records will result in permanent revocation of certification.

6. Recertification

6.1. Personnel may be recertified by one of the follow three methods:

- A one-day refresher course on the latest updates of the recertification being sought.
- The Working Task Force may designate the technician as “active” and therefore extend the certification period for another three (3) years.
- Retake original training as described on Section 3.