

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
MATERIALS CONTROL, SOILS AND TESTING DIVISION

GENERAL INFORMATION GUIDE
FOR QUALITY ASSURANCE TESTING

1.0 PURPOSE

- 1.1 The purpose of the West Virginia Division of Highways (WVDOH) Technician and Inspector Certification Program is to improve the quality assurance of embankments, subgrades, base courses, asphalt and portland cement concretes by the certification of industry and Division of Highways personnel. This procedure is to establish guidelines for this purpose.

2.0 GENERAL

- 2.1 It is the Division's intent to conduct a cooperative program of training, study, and examination so that personnel of the producer, contractor, and the Division of Highways will be able to better assure, by their increased technical knowledge, the level of quality required by the governing specifications.

3.0 SCOPE

- 3.1 This procedure is applicable to all requirements, guidelines, and other support documents of the Division of Highways which reference conditions, methods, of levels of qualification specific to the Division of Highways training and certification program.

4.0 POLICIES AND ADMINISTRATION

- 4.1 Board of Certification - The Certification Program will be carried out in accordance with general policy guidelines established or approved by the State Highway Engineer. He will be advised by a Board composed of the following members:

1. Director Construction Division
2. Director MCS&T Division
3. Director Personnel Division
4. Director Maintenance Division

5. Representatives of the Contractors Association of West Virginia
6. Representatives of the West Virginia Cement Concrete Materials Producers
7. Representatives of West Virginia Asphalt Concrete Materials Producers

4.1.1 The Certification Board will meet upon call of the State Highway Engineer.

4.2 Administration - The program will be directed by the Director, Materials Control, Soils and Testing Division (hereafter referred to as "Director"). He will have the assistance of an Implementation Committee appointed by the State Highway Engineer as follows:

1. One senior representative of the Construction Division
2. One senior representative of the Maintenance Division
3. A representative of the Human Resources Division of the Division of Highways

4.2.1 In addition to the above, the non-Division of Highways members of the Certification Board may jointly select representatives of producers and contractors to work with the Implementation Committee at such times and on such matters as the Director and the representatives mutually agree. These representatives shall not be candidates for certification.

4.2.2 The Implementation Committee shall meet upon call of the Director, or person authorized by him.

4.2.3 A Program Coordinator is to be recommended by the Implementation Committee and selected by the State Highway Engineer and will be assigned to assist the Director in administering the program and to handle planning, administration, and coordinating functions as may be delegated to him within the scope of appropriate Division of Highways directives.

4.2.4 The Human Resources Division of the Division of Highways shall provide such planning, administration, coordinating and clerical functions for the program as may be requested by the Director and/or Program Coordinator.

4.2.3 A Program Coordinator is to be recommended by the Implementation Committee and selected by the State Highway Engineer and will be assigned to assist the Director in administering the program and to handle planning, administration, and coordinating functions as may be delegated to him within the scope of appropriate Division of Highway Directives.

4.3.1 Quality control representatives of a contractor or producer must be certified as either an Aggregate Inspector, Compaction Inspector, Asphalt Concrete Technician, Cement Concrete Technician, or any combination of the four (4) depending on each individual's duties and responsibilities. Any Contractor or Producer personnel directly involved in sampling and/or testing activities must be certified as an Aggregate Inspector, Compaction Inspector, Asphalt Concrete Inspector, or Cement Concrete Inspector.

4.3.2 For purposes of the Division's Quality Assurance programs, a non-Highways Division certified technician represents the company of which he is a full-time employee on the project; owner or partner (as defined by the Federal Wage and Hour Legislation). If said company has subsidiary or affiliated organizations, each organization shall be required to have its own certified technicians unless the State Highway Engineer makes an exception. Exceptions will be granted only when it can be proven that the certified technician actually performs the duties of the technician for all the subsidiary or affiliated organizations.

4.3.3 Designated Highways Division employees must be certified in either the technician or inspector series dependent upon individual duties and responsibilities. Highways Division employees directly involved in field sampling and/or testing must be certified as an Aggregate Inspector, Compaction Inspector, Asphalt Concrete Inspector, or Cement Concrete Inspector.

4.4 Type of Examination - All written examinations will be of the "open-book" type. The practical examinations will require performance of the tests required, or allowed, by the specifications for the material type involved.

4.4.1 Aggregate Inspector - The written examination for Aggregate Inspector will consist of the following parts:

1. Fundamentals
2. Sampling, Control and Inspection
3. Testing

The Aggregate Inspector will be required to successfully complete the written examination plus a practical examination.

4.4.2 Asphalt Concrete Technician and Inspector - The written examination for Asphalt Technician will consist of the following parts:

1. Fundamentals
2. Sampling and Testing

3. Control and Inspection
4. Mix Proportioning and Adjustment

The Asphalt Concrete Inspector written examination will cover the same subject matter as the first three parts of the Technician exam: Fundamentals, Sampling, and Testing, and Control and Inspection. The Asphalt Concrete Inspector will be required to successfully complete the written examination plus a practical examination.

- 4.4.3 Cement Concrete Technician and Inspector - The written examination for Cement Concrete Technician will consist of the following parts:

1. Fundamentals
2. Sampling and Testing
3. Control and Inspection
4. Mix Proportioning and Adjustment

The Cement Concrete Inspector written examination will cover the same subject matter as the first three parts of the Technician exam: Fundamentals, Sampling and Testing, and Control and Inspection. The Cement Concrete Inspector will be required to successfully complete the written examination plus a practical examination.

- 4.4.4 Compaction Inspector - The examination for Compaction Inspector will consist of a written examination on fundamentals and a practical examination on fundamentals and a practical examination on testing procedures.

- 4.5 Training - The Division of Highways, contractors, and producers will sponsor courses of instruction consisting of schools and seminars to help prepare personnel for certification under one or more of these certification programs. To the extent possible, these course of instruction will be joint efforts of the industry and

WVDOH. Nothing in this document shall be interpreted to prohibit any party from conducting courses of instruction for their personnel to assist in preparation for these exams.

- 4.5.1 The purpose of the joint schools for technicians will be to provide helpful information and instruction for persons preparing to take the technician examinations. These courses will be in the nature of "review" or "refresher" courses and will not be designed to provide complete instruction for persons without basic foundation in the subject matter.

- 4.5.2 When these schools are held, admission requirements to technicians refresher schools shall be determined by the sponsoring group.
- 4.6 Date and Location of Examination
 - 4.6.1 Examinations, both written and practical, will be coordinated by the Human Resources Division of the Division of Highways. The locations and dates of the examinations will be announced at least two weeks prior to being given. The examination will be held on a regional basis when feasible.
- 4.7 Grades and Re-Examination - Each written technician examination will require approximately six hours and 15 minutes to complete. Passing grades will be not less than 70% for each part of the examination. Each applicant will have the opportunity to retake those parts of the examination failed. Normally, there will be two examinations given each year. Subsequent examinations will be given, as the demand may indicate, at the direction of the State Highway Engineer.
 - 4.7.1 If, over a period of two calendar years, an applicant fails to successfully complete all portions of the written and/or practical parts of the examination, then in order to obtain certification he must retake and successfully pass all portions of the examination, including those he had successfully complete during the prior two year period.
- 4.8 Certificate Non-Transferable - The status of the certification for a technician or an inspector is not transferable and is valid only for the quality control procedures designated by the bearer's certificate.
- 4.9 Revocation of Certificate - If at any time a Division of Highways, contractor's, producer's, or supplier's technician or inspector is found to have altered or falsified test reports or is found to have improperly performed tests or reported their results, the individual's certification may be rendered invalid by the State Highway Engineer upon recommendation of the Implementation Committee and/or the Board.
- 4.10 Renewal and Certification - Certification will be renewed every three (3) years. General guidance and information for renewal will be recommended by the Board as required by the State Highway Engineer.
 - 4.10.1 All renewals of certification shall be at least for a three-year period, and shall terminate on December 31 of the third calendar year after renewal has been made.

- 4.10.2 The responsibility for applying for recertification shall lie with the certified individual. The Division of Highways will attempt to contact a person by mail at their last known address. Such contact will be made within sufficient time to notify a person that their certification is about to expire. It is, however, the responsibility of the individual to inform the Division of Highways Human Resources Division of his/her current address.
- 4.10.3 Applications for recertification shall be on a standard form prepared by the Division of Highways and should include a chronological history of the candidates work within the area in which certification has been made. Such history will include only those assignments pertinent to this field during the three year period for which the person was certified. The purpose of including this work history within this field is to permit the Implementation Committee or other party so designed by the State Highway Engineer to determine if the applicant for renewal had sufficient contact within the area in order to obtain renewal without have to retake the examination.
- 4.10.4 The above application will be notarized. (Section 4.10.3)
- 4.10.5 The Implementation Committee or other designated party shall establish internal criteria for renewal and shall recommend to the State Highway Engineer disposition of each applicant. The State Highway Engineer may request the Board to review applications as required.
- 4.10.6 Upon obtaining renewal of certification, a renewal card shall be issued.
- 4.11 Application for Certification - Applications for certification will be directed to the Human Resources Division of the Division of Highways.
- 5.0 FUNCTIONS AND RESPONSIBILITIES
- 5.1 Contractor or Producer - The producer and contractor will be responsible for product control of all materials during the handling, blending, and mixing operations. The contractor and producer also will be responsible for the formulation of a design mix which will be submitted to the Division of Highways for approval.
- 5.1.1 Technician - A Quality Control representative of a contractor and producer shall be a certified technician whose responsibilities may include such duties as whose responsibilities may include such duties as proportioning and adjusting the mix, sampling, and testing the product and preparing control charts.

- 5.2 The Division of Highways - The Division of Highways is responsible for all acceptance decisions.
- 5.2.1 District Materials Supervisor - District Materials activities are the responsibility of the District Materials Supervisor.
- 5.2.2 Division Technicians and Inspectors - Division of Highways technicians and inspectors will be assigned as necessary to carry out the required acceptance decision activities. These employees will not issue instructions to the contractor or producer regarding process control activities. However, the Division of Highways representatives have the responsibility to question, and where necessary to reject, any operation or sequence of operations which are not performed in accordance with the contract documents.
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