

WEST VIRGINIA TECHNICIAN INSPECTOR CERTIFICATION PROGRAM HANDBOOK



Revised March 2019

Welcome to the West Virginia Department of Transportation Inspector Training Certification Program (TICP). 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 course, asphalt and Portland cement concrete by the certification of industry and Division of Highways personnel. This document is to establish guidelines for this purpose.

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.

This document, along with MP 106.03.50, is applicable to all requirements, guidelines, and other support documents of the Division of Highways that reference conditions, methods, and levels of qualification specific to the Division of Highways training and certification program.

There are changes and additions to the TICP every year, so please, thoroughly review this document as well as the Materials Division website to find out about any changes that may pertain to you

CERTIFICATION BOARD

As per MP 106.03.50 the certification board members shall be as follows:

State Highway Engineer
Human Resources Director
Materials Control Soils & Testing Director
Quality Assurance Training Program Administrator
Applicable Materials Control Soils and Testing Group Supervisor's

CERTIFICATIONS

The TICP offers certification classes in the following disciplines:

Portland Cement Concrete Inspector
Portland Cement Concrete Technician
Aggregate Sampling
Aggregate Technician
Soils & Aggregate Compaction Technician
Asphalt Field & Compaction Technician
Asphalt Plant Technician

****ALL CERTIFICATIONS ARE VALID FOR A THREE-YEAR PERIOD****

CLASS SUPPLY LIST

We recommend that participants bring the following items with them to the certification classes.

- 1) Laptop Computer or Tablet (Mandatory)
- 2) Photo ID
- 3) Current WV specification book and any supplemental to the specification book. (You will need this during the test. They can also be downloaded and printed from the Division of Highways web site for free.
- 4) Hand held calculator
(No electronic devices other than a Hand held calculators are allowed to be used during testing.)
- 5) 2 -#2 Pencils
- 6) Hi-lighters
- 7) Post it flags
- 8) Ruler / straight edge

SPECIAL NEEDS AND REQUESTS

Applicants with special needs should notify the Training Certification Program coordinator prior to the class to insure that the training location is prepared to accommodate their needs.

RECIPROCAL CERTIFICATIONS

The West Virginia Division of Highways may recognize reciprocity certifications from other states. Please see M.P 106.03.51 for detailed instructions. [M.P. 106.03.51](#)

American Concrete Institute (ACI) Field Testing Grade I certification will be accepted as a portion of the West Virginia PCC Inspector training. However, the applicant must pass the online West Virginia PCC. Inspector written certification test before a certification will be issued.

Acceptance of WVDOT Certifications by other state agencies is at the sole discretion of the other agency.

TRAINING

The Division of Highways, contractors, and producers may 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 courses of instruction will be joint efforts of the industry and WVDOT. 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.

The purpose of the schools is to provide helpful information and instruction for persons preparing to take the technician/inspector examinations. These courses are designed to provide instruction for persons with a basic foundation in the subject matter.

CERTIFICATIONS

All certifications listed in the sections below require written examinations. Some of the listed certifications require a practical examination after successful completion of the written examination. It is the responsibility of the applicant to determine which certification is applicable to his/her assignment. Following is a description of the certifications listing relevant information about each:

AGGREGATE CERTIFICATIONS

Aggregate Technician - The written examination for an Aggregate Inspector consists of the following areas:

- Specifications
- Aggregate Specifications and Procedures
- Aggregate Fundamentals
- Sampling, Control, and Inspection of Aggregates
- Aggregate Testing

After successful completion of the written examination, the applicant will be required to pass a practical examination consisting of his/her demonstration of testing common to normal aggregate quality requirements. Certification as an Aggregate Inspector qualifies the employee, either Industry or Division, to perform sampling and/or testing of aggregates relevant to the quality control program or acceptance program respectively.

Aggregate Sampling

The written examination for an Aggregate Sampling Inspector consists of the following areas:

- Specifications
- Sampling Fundamentals
- Sampling Methods and Equipment
- Gradations
- T11 Wash Test

The Aggregate Sampling Inspector requires the successful completion of the online examination. Certification as an Aggregate Sampling Inspector qualifies the employee, either Industry or Division, to perform sampling of aggregates relevant to the quality control program or acceptance program respectively.

The Aggregate Sampling Inspector class is an online class that must be repeated every year in order to keep the certification. The test will be available online throughout the year, but may only be attempted two times per year. A score of 70 is required for passing.

COMPACTION CERTIFICATIONS

Soils & Aggregate Compaction Technician (SACT) - The written examination for the Soils & Aggregate Compaction Technician consists of the following areas:

- Specifications
- Compaction Test Procedures
- Radiation Safety and Nuclear Gauge
- Test Procedure Problems

After successful completion of the written examination, the applicant will be required to pass a practical examination demonstrating his/her proficiency in using the testing equipment. Certification of the Compaction Technician qualifies the employee, either Industry or Division, to conduct tests on all soil construction materials that require compaction testing.

CONCRETE CERTIFICATIONS

Concrete Technician

The written examination for a Concrete Technician consists of the following areas:

- Specifications
- Fundamentals
- Sampling and Testing
- Control and Inspection
- Mix Proportioning and Adjustment

The Concrete Technician requires only the successful completion of the written examination; no practical examination is required. Certification of the Concrete Technician qualifies the employee, either Industry or Division, to make plant and mix adjustments, proportioning, and other duties.

Concrete Inspector

The written examination for a Concrete Inspector consists of the following areas:

- Specifications
- Fundamentals
- Sampling and Testing
- Control and Inspection
- Specifications

After successful completion of the written examination, the applicant will be required to pass a practical examination demonstrating his/her proficiency in conducting tests common to concrete quality control. Certification as a Concrete Inspector qualifies the employee, either Industry or Division, to perform sampling and/or testing of concrete relevant to the quality control program or acceptance program respectively.

ASPHALT MIXTURE CERTIFICATIONS

Asphalt Plant Technician

The written examination for the Asphalt Plant Technician consists of the following areas:

- Specifications
- Fundamentals
- Sampling and Testing
- Control and Inspection
- Mix Proportioning and Adjustment

After successful completion of the written examination, the applicant will be required to pass a practical examination demonstrating their proficiency in conducting tests common to Asphalt quality control. Certification of the Asphalt Technician qualifies the employee, either Industry or Division, to take asphalt mixture samples, perform quality control or quality assurance testing on plant produced asphalt mixture, make plant and mix adjustments, aggregate proportioning, and other duties.

EXAMINATIONS

All participants shall be required to furnish their own laptop or tablet to take the final course exams. Examinations, both written and practical, will be coordinated by the Materials Control, Soils & Testing Division of the Division of Highways. The locations and dates of the examinations will be announced at least four weeks prior to being given. The examinations may be held on a regional basis when feasible. All written examinations will be a one-part, 'open-book' type, with a time limit. An applicant may only test twice per certification class attendance. Practical examinations require performance of the tests required by the specifications for the material type involved.

There will be a minimum two written examinations per certification topic.

After the applicant passes the written examination, they will be granted two attempts within a 12-month calendar year to pass the practical exam. All practical examinations are pass / fail. If an applicant fails the practical the entire class must be repeated.

COURSE PRE-REQUISITES

It is highly recommended that courses be attended in sequence, with all pre-requisites fulfilled, before the applicant attends the next course in a series.

RECOMMENDED PRE-REQUISITES AND CLASS ORDER

AGGREGATE PATH		COMPACTION PATH		PORTLAND CEMENT CONCRETE PATH		ASPHALT PATH
Aggregate Sampling		Aggregate Sampling on-line		Aggregate Sampling on-line		Aggregate Sampling on-line
Accuplacer Arithmetic Score of 40+		Accuplacer Arithmetic Score of 40+		Accuplacer Arithmetic Score of 40+ (PCC Inspector)		Accuplacer Arithmetic Score of 40+
				level math class (PCC Technician)		
Aggregate Technician		Soils and Aggregate Compaction Technician		2 PCC Inspector		Asphalt Field & Compaction Technician
				PCC Technician		OR
						Asphalt Plant Technician

**** It is highly recommended that Agg. Sampling & Agg. Tech. are taken before any other certification classes**

2 PCC. Inspector should be taken before PCC. Technician.

3 MATH 115 or a college level (100 level) math class should be taken before PCC Technician.

The Aggregate Sampling is an online class. The class can only be attempted two times per year. In order to keep the certification the aggregate sampling class must be taken every three years and a score of 70% is required for passing.

CERTIFICATION AND RECERTIFICATION

Certification

An individual must attend the training and pass the examination in each level for which they are requesting certification. To pass the written examinations, the applicant must obtain minimum score of 70 percent. If an applicant fails to receive a minimum score of 70% on the first exam, they will be given another attempt to score a 70%. If they fail to receive a 70% on the second exam attempt, they will be required to repeat the entire training course.

Upon successfully completing the requirements for certification, the applicant may print their certification card from the divisions web-site.

<http://dotftp.wv.gov/materialsdir/>

This certification is not transferable. A certification shall be valid for *Three* years and expire December 31, of the 3rd year of certification.

The renewal of all certifications shall require a written exam and a hand on practical exam, where applicable. All applicants are also required to be actively working in the field for which they are seeking to be re-certified.

Re-Certification

Applicants will be given one attempt to pass a recertification exam and practical exam. Any applicant that fails to acquire a minimum score of 70% on a re-certification exam must retake the entire course and practical.

The certification holder shall be responsible updating their personal information on the online learning website. <http://www.onlinelearning.wv.gov/student/home.html>

Certification holders shall be responsible to insuring that their certifications stay current. The West Virginia Division of highways will no longer mail reminder letters to certification holders.

If an applicant seeking recertification disagrees with a recertification decision, they may file a written appeal with the board. (See *Appealing a Decision*).

TESTING PROTOCOL

The TICP has a testing protocol that must be followed. The protocol includes testing environment, time limits, proctoring exams, etc. The entire protocol will be covered with attendees prior to testing.

I.A. PROFICIENCY TESTING

Requirements are under review and will be posted as they become available.

REVOCAION OF CERTIFICATION

WVDOT TICP grants certification upon satisfactory completion and maintenance of certain conditions and may be revoked upon any breach of these conditions. Generally, certifications may be revoked if in the opinion of the certifying authority, an individual has knowingly committed acts detrimental to the integrity of the Certification Program or transportation industry. Examples of situations that warrant revocation are, but not limited to:

- Deliberate falsification of field or quality control test results or records.
- Deliberate falsification of calculations, test results or materials
- Cheating on certification exams or performance evaluations.

- Submittal of false information on certification applications.

- Submitting trial mix mixture and/or calculations completed by someone other than the signatory, or knowingly supplying trial mix mixture and/or calculations for another individual's certification.

The Program Administrator will take the lead in gathering facts and investigating any allegations which may require revocation of a certification. The review board will notify the individual in writing of intent to revoke certification(s).

Appealing a Decision

Any individual who disagrees with a decision by the board has 10 business days from the date of receipt of the notification to respond in writing to the board and present documentation to support their continued certification and/or request an opportunity for a meeting to present their case.

If the individual fails to respond within 10 days of receipt of the original notification of revocation letter, the revocation becomes final.

Not later than 20 business days after receiving a request for a meeting from the individual, the board will schedule a meeting in which the individual can present their case. If the board was not persuaded by the documentation provided by the individual and the board continues to believe that revocation of the certification is warranted, the individual may file a written appeal to the State Highway Engineer for review. All information including any letter(s) of explanation from the individual will accompany the documents submitted to the State Highway Engineer. The board will mail the decision of the State Highway Engineer for or against revocation of certification to the individual concerned. The decision by the state highway engineer is final.

The length of revocation shall be as follows:

First Offense

May include revocation of all certifications for up to one year. After the revocation period the individual may obtain recertification by retaking the classes and any practical's.

Second Offense

May include revocation of all certifications for up to for five years. There is also the possibility of demotion and reduced pay. After the revocation period the individual may obtain recertification by retaking the classes and any practical's.

Third Offense

May include revocation of all certifications for life. There is also the possibility of termination, demotion and reduced pay.

Contact Information

If you have any questions about our program or need more information. Please contact Terry Burns at 304-558-9883 or email QAschoolscoordinator@wv.gov

