Transportation Technician Qualification Program

Administration Manual



COPYRIGHT WAQTC / NAQTC "1998"

Copyright © 1998 by WAQTC (Western Alliance for Quality Transportation Construction) / NAQTC (Northwest Alliance for Quality Transportation Construction)

The rights granted under the U.S. Copyright Act (Title 17 of the U.S. Code) as used herein to define WAQTC's exclusive rights to print, reprint, publish, and vend copyrightable subject matter.

All rights reserved.

PERMISSIONS:

The NAQTC/WAQTC owns all rights to its training materials including copyrights to the Electronic Files that may be accessed on WAQTC.org and WAQTC.com. The WAQTC / NAQTC hereby grants you permission to use the materials for training and reference only.

RESTRICTIONS:

No part of the materials may be reproduced, downloaded, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, except as expressly authorized by WAQTC.

Use of WAQTC's logo, images, sound recordings, video recordings, including all derivative works is strictly prohibited without WAQTC's expressed written consent. Written consent will be duly authorized by WAQTC Executive Board Chairman or Copyright Officer.

The distribution, exchange, publishing, adaptation, modification, sub-leasing, selling, renting, the act of requesting donations, charging fees, adverting, or reproduction of any portion of WAQTC web based / electronically available training materials, logo, image(s), sound and video recording(s), is strictly prohibited without prior written permission and authorization. Failure to obtain this permission will be subject to a WAQTC Copyright Infringement Notice if it is determined to be infringement.

The mentioning of the WAQTC organization, training modules, or other products by name does not imply any intention to infringe, nor should it be construed as a recommendation or endorsement on the part of the WAQTC.

Request permission using the WAQTC permissions form emailed to WAQTC's Copyright Officer listed at WAQTC.org.

When permission is granted, the authorization only applies to that edition or work and shall not be construed as a blanket authorization for all future versions. Additional copyright requests will be required.

Reproduction of any portion of an AASHTO test method in any format is strictly prohibited without written permission from AASHTO.

TABLE OF CONTENTS

Section Page

COPYRIGHT WAQTC / NAQTC "1998" i
TABLE OF CONTENTS ii
LIST OF ABBREVIATIONS v
INTRODUCTION 1
MISSION STATEMENT 1
PURPOSE OF THE WAQTC 1
BENEFITS OF MEMBERSHIP 1
ORGANIZATIONAL STRUCTURE 2
EXECUTIVE BOARD 2
ACCREDITED CONTRIBUTING MEMBERS 2
TTQP QUALIFICATION ADVISORY COMMITTEE 2
AGENCY QUALIFICATION COMMITTEE 2
REPRESENTATIVES AND CONTACT POINTS 3
TRANSPORTATION TECHNICIAN QUALIFICATION PROGRAM (TTQP) 4
PURPOSE OF THE TTQP 4
TTQP OBJECTIVES 4
DEFINITION OF CERTIFICATION AND QUALIFICATION (QUALIFIED) 4
WHO MUST HOLD A CERTIFICATION? 5
CERTIFICATION RECIPROCITY 5
DISCLAIMERS 5
CANDIDATES WITH DISABILITIES 5
SAMPLING AND TESTING QUALIFICATIONS 6
QUALIFICATION PROCESS 6
PROGRAM MANAGEMENT 7
CERTIFICATION REGISTRATION 7
OUT-OF-STATE APPLICANTS 7
FEES FOR CERTIFICATION 7
RIGHTS AND RESPONSIBILITIES AGREEMENT 7
CANCELLATION POLICY 7
REFUND POLICY 8

EXAMINATION 8
WRITTEN EXAMINATION 8
PERFORMANCE EXAMINATION 9
RE-EXAMINATION 10
EXAMINATION MATERIALS SECURITY 10
RETENTION OF WRITTEN EXAMINATIONS 11
TECHNICIAN NOTIFICATION 12
LENGTH OF TECHNICIAN CERTIFICATION 12
CERTIFIED TECHNICIAN REGISTRY 12
INSTRUCTOR QUALIFICATIONS 13
COURSE OR EXAM ADMINISTRATOR, SCORER, AND EXAMINER QUALIFICATIONS 13
ORIENTATION 14
COURSE OR EXAM TECHNICIAN ALLOCATIONS 14
COURSE EVALUATIONS 14
REGISTRATION, POLICIES, AND INFORMATION HANDBOOK 14
UPDATES TO THE REGISTRATION, POLICIES, AND INFORMATION HANDBOOK .. 14
USE OF COURSE MATERIALS BY AN ACCREDITED CONTRIBUTING MEMBER 15
AGENCY PERSONALIZATION / ALTERATION OF MATERIALS 15
QUALIFICATION PROGRAM REVISION / UPDATES 15
RECORDING OF DOCUMENT 15
WAQTC WEBSITE (HTTP://WAQTC.ORG/) 16
PROGRAM REVIEW 16
CERTIFICATION RENEWAL POLICY 16
REVOCATION OR SUSPENSION OR DENIAL OF CERTIFICATION 16
NOTIFICATION OF CERTIFICATION REVOCATION OR SUSPENSION 17
ANNEX A QUALIFICATION PROCESSES AND MANDATORY TEST METHODS I
EXAMINATION PROCESS III
AGGREGATE (AGTT) QUALIFICATION PROCESS V
ASPHALT I (ASTT) QUALIFICATION PROCESS VII
ASPHALT II (ASTT II) QUALIFICATION PROCESS IX
CONCRETE (CTT) QUALIFICATION PROCESS XI
SELF-CONSOLIDATING CONCRETE (SCCTT) QUALIFICATION PROCESS XIII
EMBANKMENT AND BASE (EBTT) QUALIFICATION PROCESS XV

IN-PLACE DENSITY (DTT) QUALIFICATION PROCESS XVII
EMBANKMENT AND BASE/IN-PLACE DENSITY (EBTT/DTT) QUALIFICATION PROCESS XIX
SAMPLING AND REDUCTION (SRTT) QUALIFICATION PROCESS XXI
ANNEX B EXAMPLE REGISTRATION FORM AND RIGHTS AND RESPONSIBILITIES AGREEMENT XXIII
WAQTC TRANSPORTATION TECHNICIAN QUALIFICATION PROGRAM (TTQP) REGISTRATION FORM I
TRANSPORTATION TECHNICIAN QUALIFICATION PROGRAM RIGHTS AND RESPONSIBILITIES AGREEMENT II
APPENDIX A I
BYLAWS I
APPENDIX B VI
OPERATIONAL AGREEMENT VI

LIST OF ABBREVIATIONS

AgTT	Aggregate Testing Technician
ADOT	Arizona Department of Transportation
AKDOT & PF	Alaska Department of Transportation & Public Facilities
AQC	Agency Qualification Committee
AsTT	Asphalt Testing Technician I
AsTT II	Asphalt Testing Technician II
CDOT	Colorado Department of Transportation
CFLHD	Central Federal Lands Highway Division
CTT	Concrete Testing Technician
DTT	In-Place Density Testing Technician
EBTT	Embankment and Base Testing Technician
EBTT/DTT	Embankment and Base Testing Technician/ In-Place Density Testing Technician
FHWA	Federal Highway Administration
ITD	Idaho Transportation Department
LQP	Laboratory Qualification Program
MDT	Montana Department of Transportation
NDDOT	North Dakota Department of Transportation
ODOT	Oregon Department of Transportation
QAC	Qualification Advisory Committee
RP&IH	Registration, Policies, and Information Handbook
SCCTT	Self-Consolidating Concrete Testing Technician
SRTT	Sampling and Reduction Testing Technician
TTQP	Transportation Technician Qualification Program
UDOT	Utah Department of Transportation
WAQTC	Western Alliance for Quality Transportation Construction
WFLHD	Western Federal Lands Highway Division
WSDOT	Washington State Department of Transportation

WESTERN ALLIANCE FOR QUALITY TRANSPORTATION CONSTRUCTION (WAQTC)

INTRODUCTION

The Western Alliance for Quality Transportation Construction (WAQTC) is comprised of the States of Alaska, Arizona, Colorado, Idaho, Montana, North Dakota, Oregon, Utah, and Washington, and the Western and Central Federal Lands Highway Division (WFLHD and CFLHD) of the Federal Highway Administration. This organization is dedicated to improving the quality of transportation products and services.

MISSION STATEMENT

Provide leadership in the pursuit of continuously improving quality in transportation construction.

Through our partnership, we will:

- Promote an atmosphere of trust, cooperation, and communication between government agencies and the private sector
- Respond in a unified and consistent manner to identify quality improvement needs and new technologies that impact the products that we provide,
- Provide a forum to promote uniform test standards,
- Provide highly skilled, knowledgeable materials sampling and testing technicians,
- Provide reciprocity opportunities for qualified testing technicians among Accredited Contributing Members.

PURPOSE OF THE WAQTC

The WAQTC is comprised of at least one representative of each of the member agencies. WAQTC is focused on three main areas: standardizing test methods (WAQTC, AASHTO, and ASTM), certifying technicians through the Transportation Technician Qualification Program (TTQP), and working together on significant national programs including research, training, and technology deployment.

BENEFITS OF MEMBERSHIP

Cost savings

Partnering

Savings to contractors and consultants working in more than one state

Sharing resources: human, tech, financial

Reducing wasteful duplication

ORGANIZATIONAL STRUCTURE

- Executive Board
    - Contributing Member
        - Accredited Contributing Members
    - Advisory member
    - Guest
- Transportation Technician Qualification Program (TTQP) Committees
    - Qualification Advisory Committee (QAC)
    - Agency Qualification Committee (AQC)

EXECUTIVE BOARD

The Executive Board is composed of at least one representative of each of the member Agencies of the WAQTC. This committee is responsible for the mission, objectives, structure, policy decisions, the direction of the WAQTC, and other programs that may be undertaken in the future. Operational guidance for this committee can be found in the WAQTC Bylaws, Appendix A.

ACCREDITED CONTRIBUTING MEMBERS

Agencies that have agreed to follow the standards of the TTQP accreditation program will have the status of Accredited Contributing Membership on the Executive Board. These member agency representatives shall have a single vote on all operational matters of the TTQP. Further guidelines can be found in the TTQP Operational Agreement, Appendix B.

TTQP QUALIFICATION ADVISORY COMMITTEE

The Qualification Advisory Committee (QAC) is the committee that has the principal task of overseeing technical portions of the TTQP. The QAC acts in an advisory capacity to the Executive Board and reports directly to them. The QAC reviews the program and suggests changes or updates and ensures that the program continues to meet the highest standards. Additional information is contained in the TTQP Operational Agreement, Appendix B.

AGENCY QUALIFICATION COMMITTEE

The Agency Qualification Committee (AQC) is the Agency level committee that is responsible for oversight of the TTQP within the Agency to ensure region wide consistency in the implementation of the program. The Chairman of the committee is an Agency employee.

The type, size, and makeup of the committee is at the Agency's discretion. Members of the AQC are knowledgeable in the administrative procedures of the TTQP. The AQC may provide comments and suggestions to the QAC, may review, compile, and provide comments obtained from the course evaluations to the QAC, may hear and act on allegations of technician misconduct, or may act upon other such matters required for the efficient operation of the program within the Agency.

REPRESENTATIVES AND CONTACT POINTS

WAQTC Executive Board (Contributing Members)

Richard Giessel – AKDOT&PF Richard.Giessel@dot.state.ak.us	Randy Boysen – MDT rboysen@mt.gov
Michael Voth – FHWA Michael.Voth@dot.gov	Amy Beise – NDDOT abeise@nd.gov
Jesus Sandoval-Gil – ADOT jsandoval-gil@azdot.gov	Larry Ilg – ODOT Larry.D.ILG@odot.state.or.us
Craig Wieden – CDOT Craig.Wieden@state.co.us	Ken Talbot – UDOT kentalbot@utah.gov
Justin Price – ITD justin.price@itd.idaho.gov	Garrett Webster – WSDOT WebsteG@wsdot.wa.gov

TTQP Contacts

Alaska AKDOT&PF	Dan Gettman daniel.gettman@alaska.gov (907) 269-6248	North Dakota NDDOT	Sharon Taylor staylor@nd.gov (701) 328-6937
Arizona ADOT	Vacant	Oregon ODOT	Adam Rose adam.rose@odot.oregon.gov (503)780-2353
Colorado CDOT	Madeline Enright madeline.enright@state.co.us (303) 398-6587	Utah UDOT	Gilbert Arredondo garredondo@utah.gov (801) 330-3820
Idaho ITD	Isabelle Panos isabelle.panos@itd.idaho.gov (208) 3324-8828 ext. 78828	Washington State WSDOT	Mark Willoughby willoum@wsdot.wa.gov (564) 669-3746
Montana MDT	Misty Miner mminer@mt.gov (406) 233-3607		

Current course or qualification information, Qualified Technician, updates, and other useful information can be accessed at**:** **www.waqtc.org** or by contacting the respective agencies at the listed numbers.

TRANSPORTATION TECHNICIAN QUALIFICATION PROGRAM (TTQP)

PURPOSE OF THE TTQP

The Transportation Technician Qualification Program (TTQP) portion of the Administrative Manual contains uniform program policies and guidance for Agencies of the Western Alliance for Quality Transportation Construction (WAQTC). Agencies are expected to adhere to the content of this manual in order to maintain accreditation while creating uniformity and program integrity. Agencies are not authorized to make changes to content, unless specifically stated in this manual.

The purpose of this Qualification program is to provide improved quality in the transportation products. One means of accomplishing this is by ensuring that technicians have demonstrated abilities to engage in quality assurance activities (quality control, acceptance, and independent assurance) in transportation construction work under the jurisdiction of the WAQTC contracting Agencies and those laboratories that perform Agency work meet an acceptable level of performance. Unless otherwise specified in the contract documents all WAQTC members that are contracting Agencies will require that technicians who perform Agency contract work will have successfully completed the Transportation Technician Qualification Program, and laboratories that perform sampling and testing on Agency projects will have been Qualified by a Laboratory Qualification Program in their respective States.

This program is prescribed to meets, in part, the requirements of The Code of Federal Regulations (CFR) 637, Subpart B - Quality Assurance Procedures for Construction.

TTQP OBJECTIVES

- To provide highly skilled, knowledgeable materials sampling and testing technicians.
- To promote uniformity and consistency in testing.
- To provide reciprocity opportunities for qualified testing technicians among participating agencies.
- To create a harmonious working atmosphere between public and private employees based upon trust, open communication, and equivalency of qualification.

DEFINITION OF CERTIFICATION AND QUALIFICATION (QUALIFIED)

Within the context of this guide and program the term ***Certification*** is defined as confirmation (certificate) that the technician has successfully met the qualification requirements, as defined elsewhere in this guide, in one of the technical areas in which WAQTC offers such credentials. ***Qualification (qualified)*** is defined as the demonstration of the requirements in one of these technical areas.

These are solely credentials as defined by WAQTC and establish that the recipient has demonstrated a required level of knowledge and is eligible to perform work on certain transportation projects under the jurisdiction of the member contracting Agencies or others that use this program. This definition does not in any way suggest an affiliation with any national or other organization that

provides for similar credentials, or accredited organizations to provide for similar credentials, in any like areas to those that are included in the WAQTC program.

WHO MUST HOLD A CERTIFICATION?

All technicians responsible for sampling of materials and performing and reporting on tests, in any of the technical areas in which certification is offered, as defined elsewhere, on any project under the jurisdiction of one of the WAQTC contracting agencies, must hold a certificate of qualification, unless otherwise designated in the contract documents. Certification may be granted only after successfully completing the qualification requirements of this program. “Grandfathering” or “exceptions” to the TTQP, other than as noted in the Concrete Qualification, will not be granted.

CERTIFICATION RECIPROCITY

WAQTC certification in any agency may facilitate qualification in another member agency. Each agency will outline the additional requirements for their qualifications. Each technician should verify specific agency requirements before seeking reciprocity.

DISCLAIMERS

Certification of a technician by the TTQP indicates only that the technician has demonstrated a certain level of competence on a written or performance examination, or both, in a selected field of activity. Members of the WAQTC that are also contracting Agencies may require certification of technicians performing activities specified in work contracts or other activities.

Each technician or organization using technicians with certifications must make its own independent judgment of the overall competence of those technicians. The WAQTC specifically disclaims any responsibility for the actions, or the failure to act, of technicians who have received certifications through the TTQP.

CANDIDATES WITH DISABILITIES

Technicians with disabilities and those who have special needs should notify the TTQP representative at the time of registration so that appropriate accommodations can be made.

SAMPLING AND TESTING QUALIFICATIONS

Aggregate Testing Technician	AgTT
Asphalt Testing Technician I	AsTT I
Asphalt Testing Technician II	AsTT II
Concrete Testing Technician	CTT
Self-Consolidating Concrete Testing Technician	SCCTT
Embankment and Base Testing Technician	EBTT
In-Place Density Testing Technician	DTT
Embankment and Base/In-Place Density Testing Technician	EBTT/DTT
Sampling and Reduction Testing Technician	SRTT

Refer to Annex A for specific processes and mandatory test methods for each Qualification Area.

QUALIFICATION PROCESS

A technician may obtain certification by either of the following methods:

Method I

- Meet applicable prerequisites for obtaining the Certification.
- Forward the registration form, Rights and Responsibilities Agreement, documentation of applicable prerequisites, and any applicable fee to the appropriate Agency (according to that Agency's specific guidance) to secure a position in an upcoming course and examination.
- Attend the appropriate Qualification course in its entirety.
- Successfully pass the written and performance examinations.

Method II

If a technician is confident of their knowledge and experience in a Qualification subject area, he/she may obtain certification in that area, without attending a Qualification course, upon successfully completing the written and performance examination requirements as defined under each Qualification section. This alternate method of obtaining certification is subject to the limitations set forth elsewhere in this document.

The Qualification process is:

- Meet applicable prerequisites for obtaining the Certification.
- Forward the registration form, Rights and Responsibilities Agreement, documentation of applicable prerequisites, and any applicable fee to the appropriate Agency to secure a position in an upcoming examination.
- Successfully pass the written and performance examinations.

Refer to Annex B for an example registration form and Rights and Responsibilities Agreement.

A Certification obtained in this manner will expire no later than the indicated three (3) or five (5) years from the last day of the month on which requirements were successfully completed.

PROGRAM MANAGEMENT

CERTIFICATION REGISTRATION

To be eligible for Certification each technician must complete a registration form and forward it to the appropriate Agency TTQP address along with a check for any applicable fee, a signed and dated Rights and Responsibilities Agreement, applicable documentation of prerequisites, or other Agency required information. These materials must be received by the Agency at least two (2) weeks before the beginning of the Qualification course or examination. An example registration form is provided in this document. Agencies may add their specific information to this form in the designated spaces and use it, or they may develop a registration form, as long as it reflects that it pertains to the TTQP.

OUT-OF-STATE APPLICANTS

The requirements for technicians from non-WAQTC member States or Agencies wishing to obtain Certifications under the TTQP will be the same as for those from member States or Agencies. Those holding valid Certifications from other programs and showing proper documentation may be extended Certification by the TTQP if the Certification is judged to offer equal credentials as the TTQP and is approved by the Executive Board.

FEES FOR CERTIFICATION

Each Agency may assess fees as deemed necessary.

RIGHTS AND RESPONSIBILITIES AGREEMENT

All Certifications will be contingent upon the technician signing a Rights and Responsibilities Agreement. This agreement will inform the technicians of their rights and responsibilities along with the consequences of the violation of these responsibilities. The technician will submit a signed agreement with their registration for Certification. A copy of the agreement is included in this manual. Agencies may add their name to this form and may change the wording from "Qualification" to "Certification" as needed. The form may need to be tailored to conform to the legal requirement of the qualifying agency.

CANCELLATION POLICY

Each Agency should state a specific cancellation policy in the Registration, Policies, and Information Handbook. A minimum policy follows: Each Agency may designate a minimum class size for each course or examination.

If the minimum class size is not reached, the course or examination may be canceled. Courses or examinations may be canceled for other reasons not specifically stated herein. Every effort will be made to notify the registered technicians well in advance if a cancellation is necessary. If a course or examination is canceled, the registered technician may either request refund of any fee or ask that they be enrolled in the next available course or examination.

REFUND POLICY

Each Agency may establish its own refund policy for Certification fees where applicable. Suggested guideline:

1. The registration form, *Rights and Responsibilities Agreement*, fee, and any other required documentation must be received at least two (2) weeks before the start of the course.
2. Cancellation by the registered technicians within seven (7) days (without the class position being filled) will result in 50 percent of the fees being refunded. If the class position can be filled, 85 percent of the fees will be refunded (15 percent will be retained for administrative costs).
3. Unforeseen emergency during the course or Qualification proceedings will result in no refund of fees but the registered technicians will be allowed to retake the course or Qualification examinations, whichever is applicable, at a later date with an additional fee of 15 percent of the course cost.
4. No refund of fees will be made for failure to successfully complete the examination portions of the Qualification proceedings.

EXAMINATION

Each technician will be required to pass both written and performance examinations, which are designed to demonstrate both knowledge and understanding of the test procedures. Written exam Administrators and performance exam Examiners should thoroughly explain to the technicians what the exams will entail and the examination rules before the beginning of the exams. It is anticipated that multiple examination stations will be required during the performance examination; therefore, there will be multiple Examiners required for the performance portion of the examination.

Failure of either the written or performance portions of the Qualification process will require re-examination and a passing grade in the exam(s) failed, if Certification is still desired, subject to the criteria described herein.

WRITTEN EXAMINATION

The written examination will consist of multiple-choice questions, some of which will require calculations, or true/false questions. All questions require detailed knowledge of the test method procedures and basic reading comprehension.

The examination is closed book which requires that no technical materials, notes, or cellular devices are allowed to be accessed during the examination. Calculations may be required for some questions; therefore, a calculator (non-cellular) may be brought to the examination. Calculators may not be shared. All written exams will be administered within a specified time frame which will be consistent within each Agency. At the end of the designated period all exams and used scratch paper will be collected by the exam Administrator. Scratch paper will be destroyed. Exam scores are to remain confidential.

The written exam material is not to be discussed with, or provided to, any unauthorized individual. The exam should be scored and the results given to the designated Agency person no later than the end of the first business day after the exam is given.

A technician will successfully pass the written examination by meeting the following criteria:

a. A minimum score of 70 percent on the entire written exam for that Qualification area.
b. A minimum score of 60 percent on each segment (test method) of the written examination.

PERFORMANCE EXAMINATION

The performance examination may be performed with the procedure open for reference; however, referral to the exam checklist, or any notes or other material reflecting the content of the checklist, by the technician will not be permitted during the exam. Each procedure will be completed within the time limit designated by the Agency for that method. The technician is required to successfully perform all steps of the designated test procedures for the Qualification area, with the exception that a technician may be asked to explain various steps to a procedure to reduce the total test time.

All test method time limits set by the Agency will consider the reduction of time due to accelerated steps. A technician may be required to verbally describe the procedures for sampling of a material, such as Sampling Freshly Mixed Concrete, if performance of the method is not practical or feasible.

Judgment will be based on the ability to correctly perform all required procedures for each of the methods based on criteria shown on the performance examination checklists. Omission of one or more of the prescribed procedures will constitute failure of that test method. The inability to complete the test method within the designated time limit will constitute failure of the method. The technician may perform one repeat trial of a failed method, at the Examiner's convenience, on the day of the exam; however, repeat trials will be allowed in not more than 50 percent of the total test methods in that performance exam. The technician may request that a different Examiner administer a repeat trial of a failed test method. Failure of any one of the prescribed test methods after two trials will constitute failure of the performance examination portion of the Qualification process. Scoring of the exam will be on a pass/fail basis.

The performance examination will occur in the direct presence of the Examiner or the combination of performance samples and Examiner direct oversight at an Agency designated qualification facility. All steps of the method must be performed, except that certain steps may be accelerated when properly explained to the Examiner.

The Examiner may not respond to questions or assist in the performance of the method. Immediately after completion of the method, the Examiner will tell the technician if they have passed or failed that trial. If a failure has occurred, the Examiner will denote which part of the method was performed or described incorrectly. The Examiner will not stop a trial when an error has occurred, nor will they in any way signify approval or disapproval. Any disputes will be referred immediately to and reconciled by the course or exam Administrator. The results of the performance examination, as well as all performance examination checklists, will be provided to the designated Agency person no later than the end of the first business day after the exam is given.

RE-EXAMINATION

Re-examination for both the written and performance exams will be conducted according to the same criteria as the original examinations. The one exception is on the written examination, an initial exam score above 70 percent overall, but below 60 percent on one or more test methods, a re-examination on only those test methods may be administered at the agency's discretion. See Annex A for detailed information. A technician may be eligible for re-examination subject to other restrictions outlined elsewhere in this manual. The technician may either make individual arrangements with the Agency for re-examination or apply to take a scheduled exam, depending upon Agency preference or policy. Guidelines for technicians failing either examination the second time will be set by the qualifying agency. It is recommended that technicians attend the training course for that Qualification area if Certification is still desired.

EXAMINATION MATERIALS SECURITY

This policy applies to:

- all written examination materials, including blank exams, completed exams, and answer keys; and
- the Examiner's scoring checklist for performance exams.

Personnel involved with qualification examination should attend a TTQP orientation session conducted by a member of the WAQTC, QAC, or AQC. It is imperative that examination materials are always kept secure and confidential. Violation of examination security can compromise the exam and destroy its integrity and validity as a Qualification instrument. The definition of 'secure' in this document implies that materials will be kept under lock and key, except when being used in an official manner, and only those having authority as described elsewhere in this document have access. At such times as these documents are removed from a locked location, they will remain in the immediate possession and view of the authorized person only and will not be made available for possession or viewing by others.

In the event of using electronic devices for the purpose of taking the written exams, the devices must be secured in such a manner that the device is not capable of accessing the internet or any search engines or information saved to an external device during the exam.

If a Learning Management System (LMS) is used for tracking a technician's certification process, or housing of the written and performance exams, the LMS must be configured in such a way that access to the written and performance exams questions are not attainable by anyone outside of the WAQTC security structure other than to the technician taking the exam on testing day. It is highly recommended that the LMS system also be configured so that the written and performance exams can only be accessed by a testing technician during hours designated for testing on exam day.

The security structure shall be limited to only those individuals who administer the WAQTC exams and limited LMS system programmers. Any individuals who have administration rights to other areas of the LMS shall not have access rights to the written and performance exams.

Exam security must be maintained throughout all aspects of life of exam materials, including:

- Development and validation of new exams or questions
- Reproduction of exam materials
- Storage of blank exam materials and answer keys
- Administering and scoring exams
- Storage of completed exams
- Destruction of old exam materials

Access to exam materials and answer keys is limited to the following personnel, when and as needed in carrying out their responsibilities in the Qualification program:

- Program administrative personnel in the inventory, storage, and reproduction of the exam materials
- Examination Administrators, Scorers, or performance exam Examiners in the administration and scoring of exams
- Program administrative personnel in the recording of exam results, storing completed exams, and destroying old exams
- Selected individuals or subject-matter experts who have been assigned and authorized by the WAQTC to review, assess, update, revise, and validate exam materials
- Consultant personnel that have been approved, in writing, by the Executive Board

The consequences for those individuals found violating the security of Qualification examination materials are:

- A written reprimand if the violation is by negligence and the requirement to attend a TTQP orientation.
- Being banned from any future association with the TTQP if the violation is willful or intentional.

Any disciplinary action or dismissal associated with serious violations will be determined according to the policies and procedures of the employer of the offending party.

RETENTION OF WRITTEN EXAMINATIONS

After each qualification examination process, all used exam materials, both passing and failing, will be retained, in conformance to guidelines contained in the section entitled Examination Materials Security, by the agency providing the qualification examination, for at least one (1) year and will then be destroyed by shredding or other effective method. During this one-year period the WAQTC may require that these exams be forwarded to the WAQTC for objective evaluation.

TECHNICIAN NOTIFICATION

The agency conducting the qualification proceedings should notify each technician of successful or unsuccessful completion of the Qualification Requirements within ten (10) working days of the date of the completion of the examination**.**

Presence on the agency's **Certified Technician Registry** may serve as certification verification for those technicians that are successful in completing the qualification requirements.

If an agency elects to use a certification card, or similar method, to identify those technicians that have successfully completed a qualification area, the format and appearance should be coordinated with the other agencies and should reflect that it pertains to the WAQTC TTQP.

If the technician is unsuccessful in completing the qualification requirements, the procedure for re-examination should be explained, if applicable.

LENGTH OF TECHNICIAN CERTIFICATION

The length of time in which a technician may remain qualified in any qualification area will be set by the qualifying agency. This period shall be on a three (3) or five (5) year re-certification cycle.

The agency must apply the same re-certification cycle for all certifications. Technicians that are qualified by an agency using a five-year re-certification cycle may be required to demonstrate proficiency when requesting reciprocity with an agency using a three-year re-certification cycle.

CERTIFIED TECHNICIAN REGISTRY

Within ten (10) working days after completion of any qualification proceeding, the agency conducting the qualification exams should log each participant that has successfully completed the qualification requirements on the **Certified Technician Registry** for that agency which is linked to the WAQTC Website. The required information to be logged in the appropriate field is:

- A unique certification number assigned from the following Agency allotments.

Alaska	00,001 - 19,999	Montana	120,000 - 139,999
Idaho	20,000 - 39,999	Not used	140,000 - 159,999
Oregon	40,000 - 59,999	Utah	160,000 - 179,999
Washington	60,000 - 79,999	Colorado	180,000 - 199,999
Arizona	80,000 - 99,999	Not used	200,000 - 219,999
Not used	100,000 - 119,999	North Dakota	220,000 - 240,000

The number assigned with the first certification will remain with that technician no matter if additional certifications may be attained through other WAQTC Agencies. Should a technician obtain a certification in a state other than the one designated by the assigned certification number, the agency issuing the additional certification will notify the agency where the certification number originated so that the certification may be properly registered.

- The successful technician's full name
- The area in which the certification is received is designated by:

Aggregate	AgTT	Concrete	CTT
Asphalt	AsTT	Self-Consolidating Concrete	SCCTT
Asphalt II	AsTT II	Embankment and Base	EBTT
In-Place Density	DTT	Sampling and Reduction	SRTT
Embankment and Base / In-Place Density (combined)			EBTT/DTT

- The day, month, and year of the Certification expiration.

INSTRUCTOR QUALIFICATIONS

Instructors for the TTQP in each agency should meet the following guidelines:

- Extensive experience in the test methods contained in the qualification area
- Experience and demonstrated ability in training and communicating with participants
- Exhibition of a positive attitude while interacting with others
- Willingness to uphold the high standards set by the TTQP and to follow the policy guidelines

Instructors should complete a TTQP orientation session presented by the agency's WAQTC representative, a member of the QAC, or the AQC who has also completed such an orientation on the policies and procedures of the TTQP. Instructors should also have successfully completed the qualification area in which they will be instructing. The agency should maintain a list of those technicians that meet the requirements to act as instructors in each qualification area.

COURSE OR EXAM ADMINISTRATOR, SCORER, AND EXAMINER QUALIFICATIONS

Only those individuals that have attended TTQP policies and procedures orientation session, conducted by a representative of the WAQTC, QAC, or AQC, should administer or score written exams. It is not required that the same party that administers the written exam also scores it. Performance exam Examiners should possess considerable experience in performing both general materials testing and the methods that they will be proctoring. In addition, they should demonstrate the same willingness to uphold the standards of the TTQP. Furthermore, Examiners should not be in the chain of command of those being Qualified, nor should they be related. Examiners should also have successfully completed the Qualification area that they will be proctoring.

Each Agency should also hold instructional sessions to ensure that each performance exam Examiner proctors the exams in the same manner.

The Agency should maintain a registry of all Administrators, Scorers, and Examiners that have met the requirements to perform such functions.

ORIENTATION

All people participating in any capacity in the administration of the TTQP should be required to attend a TTQP orientation session presented by a member of the WAQTC, the QAC, or the AQC. The session should cover the appropriate sections of the *Administrative Manual*, the intent and scope of the TTQP, the responsibilities of the party(s) attending the orientation, and how they fit into the scope of the program. The content and thoroughness of the orientation may be tailored to the responsibilities of the person within the program.

Each Agency should maintain a registry of all technicians that have completed this orientation.

COURSE OR EXAM TECHNICIAN ALLOCATIONS

Agencies may set technician allocations for Qualification courses or examinations as they deem necessary.

COURSE EVALUATIONS

Course evaluations will be obtained for each Qualification course administered by member Agencies. Instructors should stress the importance of thoughtful completion of these forms. The AQC in each participating Agency should review and compile these comments and provide suggestions to the QAC for consideration during their scheduled program meetings. An evaluation form is included in the training materials for each course.

REGISTRATION, POLICIES, AND INFORMATION HANDBOOK

Guidance for technician registration in a course or exam, TTQP policies, and other information intended for the use of the technician is contained in the TTQP Registration, Policies and Information Handbook (RP&IH) which is a TTQP standardized document. This handbook should be kept up to date by each Agency. Agency specific policies, information, examination, or training requirements, etc., as defined below and elsewhere in this manual, may be entered in this handbook, to supplement the standard TTQP information, for reference by the technician or laboratory.

UPDATES TO THE REGISTRATION, POLICIES, AND INFORMATION HANDBOOK

As changes to the program occur or other RP&IH updates are required, the new information will be posted on the WAQTC Website. Others may obtain this information by calling the TTQP representative in their state.

Even though every effort will be made to make current information available to everyone, it is the responsibility of the certification holder to keep current on new issues and to provide the appropriate representative with address and employer changes if required.

USE OF COURSE MATERIALS BY AN ACCREDITED CONTRIBUTING MEMBER

Accredited Contributing Member Agencies may use the course materials as necessary to meet the Agencies' needs provided the requirements of the section titled 'Agency Personalization /Alteration of Materials' are met.

AGENCY PERSONALIZATION / ALTERATION OF MATERIALS

Member Agencies are not authorized to make any changes to any materials, such as course materials or administrative procedures that fall under the jurisdiction of the TTQP with the following exceptions: Agencies may include in the RP&IH their own Agency specific information, fee structure, cancellation and refund policies, course allocations, individualized registration forms, or other such information as defined in this manual.

The written examination questions may be organized or compiled according to Agency preference if the content and procedure adheres to the guidance provided in this manual and the exam reflects that it is a product of the WAQTC TTQP. Agencies may provide supplemental administrative guidance for agency specific issues in the RP&IH if it is not in conflict with any guidance contained herein. The addition of agency specific supplemental information, such as agency specific test methods, contract administration guidance, specification information, or quality assurance program information to qualification courses is not considered a change to the program.

QUALIFICATION PROGRAM REVISION / UPDATES

Revisions and updates to the TTQP will be recommended to the WAQTC Executive Board by the QAC based upon participant and agency comments and materials testing procedural changes. The QAC will meet each year by July 30, or as directed by the Executive Board, to consider such changes. Suggestions and comments, in addition to those received from course evaluation forms, should be provided in writing to the AQC, which will be delivered to the QAC for consideration. Those revisions or updates adopted by the Executive Board will then be conveyed to the designated party in each agency for uniform incorporation into the agency's master copy of the appropriate course material, or other document, by October 1 of the year in which adopted.

RECORDING OF DOCUMENT

Each agency should document the date of the latest revision of program materials, including the *Registration, Policies, and Information Handbook* or course materials, etc., by entering the following information, or information of a similar format, at the bottom of the inside front cover of the applicable document when **authorized alterations** to that document have been completed.

For agency specific revisions: "Revised by (enter agency abbreviation) - (enter date)"

Those changes that may be affected by WAQTC only will be signified by:

For WAQTC approved revisions: 'Revised by WAQTC - (enter date)"

WAQTC WEBSITE (http://waqtc.org/)

The WAQTC Website is intended to provide useful information both to the member agencies, other agencies, and the public about the TTQP and other programs of the WAQTC.

It is intended that the information entered will be of a like appearance between agencies so coordination will be required as new needs are identified. It is the responsibility of each agency to keep their specific information up to date in accordance with the guidelines set forth in this manual. Suggestions for improvement to the Website, or other facets of the program, may be provided to a member of the WAQTC or by the home page email link.

PROGRAM REVIEW

Guidance on the review of the TTQP is contained in the *TTQP Operational Agreement* which can be found in the appendix. In addition to this coordinated review, it is suggested that each AQC or their designated representative(s) conduct periodic reviews within their Agency to maintain consistency in the program.

CERTIFICATION RENEWAL POLICY

Certification renewal is required to be completed by the certification's expiration date. The technician is responsible for obtaining their applicable certification renewal and must do so before the expiration date of the certification. The procedures for certification renewal are the same as for the initial certification. Although renewal is the responsibility of the technician, an agency may adopt other policies, such as notifying the technician before the expiration date, if desired. Interim or certification refresher courses may be offered; however, it is also the responsibility of the technician to stay abreast of changes to procedures and test methods.

Renewal of certification may be obtained in the following manner:

A technician obtains renewal of certification by passing the written and performance exam, as applicable, required for that certification. The agency may either require that the technicians be responsible for scheduling their own written and/or performance examination, or the agency may schedule specific times and locations in which this is accomplished.

Re-examination policies, for those failing to pass a certification renewal on the first attempt, will be the same as for the original certifications.

REVOCATION OR SUSPENSION OR DENIAL OF CERTIFICATION

Certifications awarded by the TTQP may be revoked at any time by the Agency Qualification Committee (AQC) for just cause. Proposed revocations or denial will be sent to the technician in writing along with the technician's right to appeal the proposed revocation or denial. A proposed revocation is effective upon receipt by the technician and will be affirmed, modified, or vacated following any appeal. The reasons that technicians will be subject to revocation, suspension or denial of their certifications are *negligence* or *abuse* of their responsibilities.

Agencies may disqualify technicians for other reasons of just cause, which may or may not be specifically defined herein following the due process procedures outlined herein.

Negligence is defined as unintentional deviations from approved procedures which may or may not cause erroneous results or the TTQP Program.

The following penalties are guidelines for findings of *negligence*: The first finding of *negligence* will result in a letter of reprimand being sent to both the technician and their employer; the second will result in a thirty (30) day suspension of certification, third in a one hundred eighty (180) day suspension of Certification and the fourth in permanent revocation of the Certification. The AQC may deviate from these penalty guidelines if warranted.

Abuse is defined as intentional deviations from approved procedures or the TTQP Program. The following penalties are guidelines for findings of *abuse*: The first finding of *abuse* will result in a one (1) year suspension to permanent revocation of a technician's certification. Any subsequent finding of *abuse* will result in the technician being ineligible for any future type of TTQP Certification. The AQC may deviate from these penalty guidelines if warranted.

Revocations or suspensions for *abuse* or *negligence* in one Qualification area will be considered revocations or suspensions in all certifications held by the technician. Such revocations or suspensions will be in effect in all member agencies of the WAQTC.

It should be noted that should a technician fail to successfully complete certification renewal in a specialty area, that technician will be considered disqualified in that area, only, until the requirements for certification renewal have been successfully met, subject to the limitations set forth in this document.

Allegations of *negligence* or *abuse* will be made to the AQC in writing. The allegations will contain the name, address, and signature of the individual(s) making the allegation. The allegations will be investigated by the AQC. The accused and the individual(s) making the allegation will be given the opportunity to appear before the AQC. All parties involved will be notified in writing of the findings by the AQC. Any warranted penalties will be imposed in accordance with the guidance contained herein. Decisions regarding allegations of *negligence* or *abuse* may be appealed in writing to the AQC Chair who will independently consider such written appeals but may rely on the advice and counsel of the AQC and take such action as they consider appropriate.

NOTIFICATION OF CERTIFICATION REVOCATION OR SUSPENSION

Each agency may notify the other members of the WAQTC, or other participants in the TTQP, of anyone having a certification revoked or suspended. The responsible agency will remove the certification expiration date, for all applicable certifications, from the Qualified Technician Registry immediately upon the revocation or suspension of the certification(s) as verification to other agencies of such action.

ANNEX A
QUALIFICATION PROCESSES AND MANDATORY TEST METHODS

Blank Page

EXAMINATION PROCESS

The following criteria are common to the examination for each module.

- Written Examination
    a. Closed Book
    b. Five (5) questions minimum per test method including multiple choice, true or false, and calculations.
    c. The written exam must be completed within the time limit designated by the Agency.
- Performance Examination
    a. Each technician will demonstrate proficiency in the designated test methods.
    b. Open procedure, but the technician **will not** have access to the performance exam checklist.
    c. Each procedure must be performed within the time limit set by the Agency for that test method.
    d. The technician may be asked to explain various steps to the procedure to reduce the full test time. All test method time limits set by the Agency will consider the reduction of time due to accelerated steps.
    e. Each test method will have a performance exam checklist with a "P" or "F" checked by the Examiner.
- Scoring - Written/Performance

    Written:

    a. Initial exam (first attempt): An overall score of 70 percent with a minimum of 60 percent on each test method is a passing score.

        An initial exam overall score below 70 percent will require a re-examination on all test methods.

        An initial exam score above 70 percent overall, but below 60 percent on one or more test methods, will require a re-examination.

    b. Re-exam (second attempt):

        A re-exam overall score below 70 percent is a failure.

        A re-exam score above 70 percent overall, but below 60 percent on one or more test methods, is a failure.

An agency may allow a partial re-examination:

In the case of one test method comprising the re-examination, the technician must receive a score of 70 percent.

In the case of more than one test method comprising the re-examination, the technician must receive an overall score of 70 percent with a minimum of 60 percent on any one test method.

Performance:

All performance checklists must have 100 percent of the blanks checked "P" and each test method must be performed within the designated time limit.

- Re-examination Policy - Written/Performance

  a. Anyone failing the written examination on the first attempt is required to retake the written examination at the scheduling convenience of the Agency, and pass, if Certification by the TTQP is still desired.

  b. Anyone failing a test method on the performance exam may repeat that trial during the day of the performance exam. Repeat trials will be allowed in not more than 50 percent of the total test methods in that performance exam. Failure of any one of the prescribed test methods after two trials will constitute failure of the whole performance exam. Anyone failing the performance examination on the first attempt is required to retake the performance examination at the scheduling convenience of the Agency, and pass, if Certification by the TTQP is still desired.

  c. Guidelines for technicians failing either examination the second time will be set by the qualifying agency. *It is recommended that technicians attend the training course for that Certification if Certification is still desired.*

Additional examination information can be found in the Program Management section.

AGGREGATE (AgTT) QUALIFICATION PROCESS FOR MATERIALS TESTING TECHNICIANS

Aggregate Qualification is designed for those technicians responsible for field sampling and testing of aggregate for bases, asphalt mixtures, or Portland cement concrete. Technicians include contractor and supplier quality control personnel, consulting engineering and materials testing firm personnel, quality assurance technicians, and public agency personnel.

The process for obtaining certification in Aggregate:

- Pass the written and performance examinations.

Course Length: approximately 5 days

Course Size: 12-15 recommended

Recommendation:

- The technician should exhibit basic mathematics and reading comprehension skills.

TEST METHODS FOR AGGREGATE QUALIFICATION

AASHTO/ WAQTC	PROCEDURE	TRAINING Classroom (C) Laboratory (L)	EXAM Written (W) Performance (P)
R 90	Sampling Aggregate Products	C	W, P*
R 76	Reducing Samples of Aggregate to Testing Size	C, L	W, P
T 255	Total Evaporable Moisture Content of Aggregate by Drying	C, L	W, P
T 27/T 11	Sieve Analysis of Fine and Coarse Aggregate Materials Finer Than 75 µm (No. 200) Sieve in Aggregates by Washing **(This is a combined field operating procedure)**	C, L	W, P**
T 335	Determining the Percentage of Fracture in Coarse Aggregate	C, L	W, P
T 176	Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test	C, L	W, P

* The technician may either be asked to physically sample materials or only to explain the sampling process during this portion of the performance examination.

** Participating WAQTC members will require a written and performance examination on one of these three methods (A, B, or C), which may require that a technician seeking employment in another Agency will have to demonstrate proficiency in a different method also.

ASPHALT I (ASTT) QUALIFICATION PROCESS FOR MATERIALS TESTING TECHNICIANS

Asphalt I Qualification is designed for those technicians responsible for field sampling and testing of asphalt mixtures. Technicians include contractor and supplier quality control personnel, consulting engineering and materials testing firm personnel, quality assurance technicians, and public agency personnel.

The process for obtaining certification in Asphalt I:

- Pass the written and performance examinations.

Course Length: approximately 5 days

Course Size: 12-15 recommended

Recommendation:

- The technician should exhibit basic mathematics and reading comprehension skills.

TEST METHODS FOR ASPHALT I QUALIFICATION

AASHTO/ WAQTC	PROCEDURE	TRAINING Classroom (C) Laboratory (L)	EXAM Written (W) Performance (P)
R 97	Sampling Asphalt Mixtures	C	W, P*
R 47	Reducing Samples of Asphalt Mixtures to Testing Size	C, L	W, P
T 329	Moisture Content of Asphalt Mixtures by Oven Method	C, L	W, P
T 308	Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method	C, L	W, P
T 209	Theoretical Maximum Specific Gravity (G_{mm}) and Density of Asphalt Mixtures	C, L	W, P
T 166	Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens	C, L	W, P
R 66	Sampling Asphalt Materials	C	W
T 30	Mechanical Analysis of Extracted Aggregate	C, L	W, P

* The technician may either be asked to physically sample materials or may only be asked to explain the sampling process during this portion of the performance examination.

ASPHALT II (ASTT II) QUALIFICATION PROCESS FOR MATERIALS TESTING TECHNICIANS

Asphalt II Qualification is designed for those technicians responsible for field sampling and testing of Asphalt. Technicians include contractor and supplier quality control personnel, consulting engineering and materials testing firm personnel, quality assurance technicians, and public agency personnel.

The process for obtaining certification in Asphalt II:

- Pass the written and performance examinations.

Course Length: approximately 5 days

Course Size: 12-15 recommended

Recommendation:

- The technician should exhibit basic mathematics and reading comprehension skills.

TEST METHODS FOR ASPHALT II QUALIFICATION

AASHTO/ WAQTC	PROCEDURE	TRAINING Classroom (C) Laboratory (L)	EXAM Written (W) Performance (P)
R 97	Sampling Asphalt Mixtures	C	W, P*
R 47	Reducing Samples of Asphalt Mixtures to Testing Size	C, L	W, P
T 329	Moisture Content of Asphalt Mixtures by Oven Method	C, L	W, P
T 308	Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method	C, L	W, P
T 209	Theoretical Maximum Specific Gravity (G_{mm}) and Density of Asphalt Mixtures	C, L	W, P
T 166	Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens	C, L	W, P
R 66	Sampling Asphalt Materials	C	W
T 30	Mechanical Analysis of Extracted Aggregate	C, L	W, P
T 312	Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor	C, L	W, P
TM 13	Volumetric Properties of Asphalt Mixtures	C	W, P**

* The technician may either be asked to physically sample materials or may only be asked to explain the sampling process during this portion of the performance examination.

** Performance examination consists of performing appropriate calculations

Revised by WAQTC October 2026

CONCRETE (CTT) QUALIFICATION PROCESS
FOR MATERIALS TESTING TECHNICIANS

Concrete Qualification is designed for those technicians responsible for field sampling and testing of Portland cement concrete. Technicians include contractor and supplier quality control personnel, consulting engineering and materials testing firm personnel, quality assurance technicians, and public agency personnel.

The process for obtaining certification in Concrete:

- Pass the written and performance examinations

Course Length: approximately 3 days

Course Size: 20-30 recommended

Recommendation:

- The technician should exhibit basic mathematics and reading comprehension skills.

Reciprocity

ACI (American Concrete Institute) Certification Concrete Field-Testing Technician Grade 1

- WAQTC recognizes ACI Concrete Field-Testing Technician-Grade 1 as an equivalent to WAQTC Concrete (CTT). Reciprocity **may be** granted by submitting evidence of a valid ACI certification and a completed Rights and Responsibilities form. However, each WAQTC member agency may have further requirements.
- For technicians requesting to receive a WAQTC certification in ACI Concrete Field Testing Technician-Grade 1 through the ACI reciprocity clause it is recommended that a review of the testing standards listed on the following page occurs. The ACI certification process requires performing ASTM standard test methods. ASTM standards may or may not be the same as the AASHTO and WAQTC standard test methods required by this qualification area.

  By signing the WAQTC Rights and Responsibilities Agreement form, a technician pledges to follow the applicable AASHTO and WAQTC test methods when sampling or testing on jobsites requiring WAQTC certifications.

TEST METHODS FOR CONCRETE QUALIFICATION

AASHTO/ WAQTC	PROCEDURE	TRAINING Classroom (C) Laboratory (L)	EXAM Written (W) Performance (P)
TM 2	Sampling Freshly Mixed Concrete	C	W, P*
T 309	Temperature of Freshly Mixed Portland Cement Concrete	C, L	W, P
T 119	Slump of Hydraulic Cement Concrete	C, L	W, P
T 121	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete	C, L	W, P
T 152	Air Content of Freshly Mixed Concrete by the Pressure Method	C, L	W, P
R 100	Casting and Curing Concrete Strength Test Specimens in the Field	C, L	W, P**

* The technician may either be asked to physically sample materials or may only be asked to explain the sampling process during this portion of the performance examination.

** Participating WAQTC members will require a performance examination on one of the two sizes of cylinders, 150 mm (6 in.) x 300 mm (12 in.) or 100 mm (4 in.) x 200 mm (8 in.), which may require that a technician seeking employment in another Agency will have to demonstrate proficiency in the other size cylinder also.

SELF-CONSOLIDATING CONCRETE (SCCTT) QUALIFICATION PROCESS FOR MATERIALS TESTING TECHNICIANS

Self-Consolidating Concrete Qualification is designed for those technicians responsible for field sampling and testing of self-consolidating concrete. Technicians include contractor and supplier quality control personnel, consulting engineering and materials testing firm personnel, quality assurance technicians, and public agency personnel.

The process for obtaining certification in Self-Consolidating Concrete:

- Meet the prerequisites. (see below)
- Pass the written and performance examinations

Course Length: approximately 3 days

Course Size: 20-30 recommended

Prerequisites for being qualified in Self-Consolidating Concrete: Current qualification in CTT or ACI Concrete Field-Testing Technician-Grade 1 Reciprocity.

Recommendation:

- The technician should exhibit basic mathematics and reading comprehension skills.

TEST METHODS FOR SELF-CONSOLIDATING CONCRETE QUALIFICATION

AASHTO/ WAQTC	PROCEDURE	TRAINING Classroom (C) Laboratory (L)	EXAM Written (W) Performance (P)
T 347/T 351	Slump Flow of Self-Consolidating Concrete and Visual Stability Index / (VSI) of Self-Consolidating Concrete (SCC) **(This is a combined field operating procedure)**	C, L	W, P
T 345	Passing Ability of Self-Consolidating Concrete (SCC) by the J-Ring	C, L	W, P
TM 18	Penetration Test for Static Segregation Resistance of Self-Consolidating Concrete (SCC)	C, L	W, P
TM 19	Static Segregation of Self-Consolidating Concrete (SCC) Using the Column Method	C, L	W, P

EMBANKMENT AND BASE (EBTT) QUALIFICATION PROCESS FOR MATERIALS TESTING TECHNICIANS

Embankment and Base Qualification is designed for those technicians responsible for field sampling and testing of soil and soil-aggregate mixtures. Technicians include contractor and supplier quality control personnel, consulting engineering and materials testing firm personnel, quality assurance technicians, and public agency personnel.

The process for obtaining certification in Embankment and Base:

- Pass the written and performance examinations.

Course Length: approximately 5 days

Course Size: 12-15 recommended

Recommendation:

- The technician should exhibit basic mathematics and reading comprehension skills.

TEST METHODS FOR EMBANKMENT AND BASE QUALIFICATION

AASHTO/ WAQTC	PROCEDURE	TRAINING Classroom (C) Laboratory (L)	EXAM Written (W) Performance (P)
T 255/T 265	Total Moisture Evaporable Content of Aggregate by Drying / Laboratory Determination of Moisture Content of Soils **(This is a combined field operating procedure)**	C, L	W, P
T 99/T 180	Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop / Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop **(This is a combined field operating procedure)**	C, L	W, P*/ **
R 75	Developing a Family of Curves using Soil Moisture-Density Relations	C	W, P**
T 85	Specific Gravity and Absorption of Coarse Aggregate	C, L	W, P

* Participating WAQTC members will require a written and performance examination on one of these two methods, which may require that a technician seeking employment in another Agency will have to demonstrate proficiency in the other method also.

** Performance exam consists of graphing a family of curves and calculations.

IN-PLACE DENSITY (DTT) QUALIFICATION PROCESS FOR MATERIALS TESTING TECHNICIANS

In-Place Density Qualification is designed for those technicians responsible for field testing for In-Place Density on soils, soil aggregate mixtures, aggregate products, and asphalt mixtures. Technicians include contractor and supplier quality control personnel, consulting engineering and materials testing firm personnel, quality assurance technicians, and public agency personnel.

The process for obtaining certification in In-Place Density:

- Pass the written and performance examinations.

Course Length: approximately 5 days

Course Size: 12-15 recommended

In-Place Density testing:

- Technicians and their employers are responsible to independently meet all safety, training, and certification requirements for the transportation and use of a nuclear density gauge.

Recommendation:

- The technician should exhibit basic mathematics and reading comprehension skills.

TEST METHODS FOR IN-PLACE DENSITY QUALIFICATION

AASHTO/ WAQTC	PROCEDURE	TRAINING Classroom (C) Laboratory (L)	EXAM Written (W) Performance (P)
T 255/T 265	Total Evaporable Moisture Content of Aggregate by Drying /Laboratory Determination of Moisture Content of Soils **(This is a combined field operating procedure)**	C, L	W, P
T 99/T 180	Moisture-Density Relations Using a 2.5 -kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop / Moisture-Density Relations Using a 4.5 4-kg (10-lb) Rammer and a 457-mm (18-in.) Drop Soils **(This is a combined field operating procedure)**	C	W
R 75	Developing a Family of Curves using Soil Moisture-Density Relations	C	
T 272	One Point Method for Determining Maximum Dry Density and Optimum Moisture	C, L	W, P*
T 85	Specific Gravity and Absorption of Coarse Aggregate	C	
T 310	In-Place Density and Moisture Content of Soil and Soil Aggregate by Nuclear Methods	C, L	W, P
T 209	Theoretical Maximum Specific Gravity (G_{mm}) of Asphalt Mixtures	C	
T 166	Bulk Specific Gravity (G_{sb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens	C	
T 355	In-Place Density of Asphalt Mixtures by Nuclear Methods	C, L	W, P

* Participating WAQTC members will require a performance examination on one of the two methods, AASHTO T 99 or AAASHTO T 180, which may require that a technician seeking employment in another Agency will have to demonstrate proficiency in the other method.

EMBANKMENT AND BASE/IN-PLACE DENSITY (EBTT/DTT) QUALIFICATION PROCESS FOR MATERIALS TESTING TECHNICIANS

Embankment and Base / In-Place Density Qualification is designed for those technicians responsible for field sampling and testing of soils and soil-aggregate mixtures and field testing in-place density on soils, soil aggregate mixtures, aggregate products, and asphalt mixtures. Technicians include contractor and supplier quality control personnel, consulting engineering and materials testing firm personnel, quality assurance technicians, and public agency personnel.

The process for obtaining certification in Embankment and Base / In-Place Density:

- Pass the written and performance examinations.

Course Length: approximately 5 days

Course Size: 12-15 recommended

In-Place Density testing:

- Technicians and their employers are responsible to independently meet all safety, training, and certification requirements for the transportation and use of a nuclear density gauge.

Recommendation:

- The technician should exhibit basic mathematics and reading comprehension skills.

TEST METHODS FOR EMBANKMENT AND BASE / IN-PLACE DENSITY QUALIFICATION

AASHTO/ WAQTC	PROCEDURE	TRAINING Classroom (C) Laboratory (L)	EXAM Written (W) Performance (P)
T 255/T 265	Total Evaporable Moisture Content of Aggregate by Drying /Laboratory Determination of Moisture Content of Soils **(This is a combined field operating procedure)**	C, L	W, P
T 99/T 180	Moisture-Density Relations Using a 2.5 -kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop / Moisture-Density Relations Using a 4.5 4-kg (10-lb) Rammer and a 457-mm (18-in.) Drop **(This is a combined field operating procedure)**	C, L	W, P*/ **
R 75	Developing a Family of Curves using Soil Moisture-Density Relations	C	W, P**
T 272	One Point Method for Determining Maximum Dry Density and Optimum Moisture	C, L	W, P*
T 85	Specific Gravity and Absorption of Coarse Aggregate	C, L	W, P
T 310	In-Place Density and Moisture Content of Soil and Soil Aggregate by Nuclear Methods	C, L	W, P
T 209	Theoretical Maximum Specific Gravity (G_{mm}) of Asphalt Mixtures	C	
T 166	Bulk Specific Gravity (G_{sb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens	C	
T 355	In-Place Density of Asphalt Mixtures by Nuclear Methods	C, L	W, P

* Participating WAQTC members will require a performance examination on one of the two methods, AASHTO T 99 or AAASHTO T 180, which may require that a technician seeking employment in another Agency will have to demonstrate proficiency in the other method.

** Performance exam consists of graphing a family of curves and calculations.

SAMPLING AND REDUCTION (SRTT) QUALIFICATION PROCESS FOR MATERIALS TESTING TECHNICIANS

Sampling and Reduction Qualification is designed for those technicians responsible for field sampling of aggregate, asphalt mixtures, and asphalt binder; and reduction of aggregate and asphalt mixture samples. Technicians include contractor and supplier quality control personnel, consulting engineering and materials testing firm personnel, quality assurance technicians, and public agency personnel.

The process for obtaining certification in Sampling and Reduction:

- Pass the written and performance examinations.

Course Length: approximately 2 days

Course Size: 12-15 recommended

Recommendation:

- The technician should exhibit basic mathematics and reading comprehension skills.

TEST METHODS FOR SAMPLING AND REDUCTION QUALIFICATION

AASHTO/ WAQTC	PROCEDURE	TRAINING Classroom (C) Laboratory (L)	EXAM Written (W) Performance (P)
R 90	Sampling Aggregate Products	C	W, P*
R 76	Reducing Samples of Aggregate to Testing Size	C, L	W, P
R 97	Sampling Asphalt Mixtures	C	W, P*
R 47	Reducing Samples of Asphalt Mixtures to Testing Size	C, L	W, P
R 66	Sampling Asphalt Materials	C	W

* The technician may either be asked to physically sample materials or only to explain the sampling process during this portion of the performance examination.

ANNEX B
EXAMPLE REGISTRATION FORM AND RIGHTS AND RESPONSIBILITIES AGREEMENT

Blank Page

WAQTC TRANSPORTATION TECHNICIAN QUALIFICATION PROGRAM (TTQP)
REGISTRATION FORM

Name:	Employer:
Phone #:	Employer's Phone #:
Email Address	**Current WAQTC Certification #:** (If applicable)

Check one: ___Original Certification ____ Renewal of Certification
Do you possess a WAQTC Certification from another agency? ____ No __ Yes, if Yes, from which agency?_____

Desired certifications (select only one certification area per registration form)

		Cost		Cost
____ Aggregate Testing Technician (AgTT)	____Course & Exam	$*(Agency Fee)*	____Exam Only	$ (*Agency Fee)*
____ Asphalt Testing Technician (AsTT)	____Course & Exam	$	____Exam Only	$
____ Asphalt Testing Technician II (AsTT II)	____Course & Exam	$	____Exam Only	$
____ Concrete Testing Technician (CTT)	____Course & Exam	$	____Exam Only	$
____ Self-consolidating Concrete Testing Technician (SCCTT)	____Course & Exam	$	____Exam Only	$
____ Sampling and Reduction Testing Technician (SRTT)	____Course & Exam	$	____Exam Only	$
____In-Place Density Testing Technician (DTT)	____Course & Exam	$	____Exam Only	$
____ Embankment and Base / In-Place Density	____Course & Exam	$	____Exam Only	$
____ Embankment and Base / In-Place Density Testing Technician (EBTT/DTT)	____Course & Exam	$	____Exam Only	$

EXAMPLE NOT FOR USE

Choose a course date and location or an examination (only) date and location

First Choice		Second Choice	
Date	**Location**	**Date**	**Location**

Technicians seeking Certification in one of the designated specialties should consult the TTQP Registration, Policies, and Information Handbook (RP&IH) for Certification criteria, prerequisites, other policies and requirements, and general information. **The registration form should be submitted through the Agency contact shown below and must be received at least two (2) weeks before the start of the course or exam. The technician's full name, Certification number, and Certification information will be listed on the WAQTC Web page's Registry of Qualified Technicians upon successful completion of the Certification requirements.**

Agency contact information.	____ Passed Certification ____ Failed Certification _____ **WAQTC CERTIFICATION NUMBER** _____ Signature, AQC Chair or Designee

Revised by WAQTC October 2026

TRANSPORTATION TECHNICIAN QUALIFICATION PROGRAM
RIGHTS AND RESPONSIBILITIES AGREEMENT

This document affirms that _____(*technician's name*)_____ ,

hereinafter the Technician, desires to be Qualified by the Transportation Technician Qualification Program (TTQP) as a _____(*name of Qualification desired*)_____

Certification carries inherent rights and responsibilities. These rights include being exclusively sanctioned along with others so qualified by TTQP to perform sampling, testing, and reporting of test results for quality control and quality assurance programs. These responsibilities include performing and reporting tests with the accuracy and precision expected of the Technician in accordance with the required test procedures. By signing this document, the Technician agrees to abide by all the terms of the TTQP included in the *Registration, Policies, and Information Handbook* and as set forth by the contracting Agency.

Findings of negligence or abuse of these rights and responsibilities will be penalized upon recommendation by the Agency Qualification Committee (AQC) and any appeal to the AQC Chair. Penalties, as prescribed herein, may be assessed for Technician abuse or negligence. Negligence is defined as unintentional deviations from approved procedures which may or may not cause erroneous results, or deviations to the TTQP Program. The first finding of negligence will result in a letter of reprimand being sent to both the employee and the employer, the second will result in a thirty (30) day suspension of Certification, the third in a one hundred eighty (180) day suspension of certification, and the fourth in permanent suspension of Certification. Abuse is defined as intentional deviations from approved procedures, or deviations to the TTQP Program. The first finding of abuse will result in a one (1) year suspension to permanent revocation of a Technician's certification. Any subsequent finding of abuse will result in permanent revocation of certification. Revocation or suspension of one certification will be considered a revocation or suspension of all Certifications held by the Technician. Permanent revocation of Certification will result in that person being ineligible for any TTQP Certification. The penalties are guidelines and the AQC may impose harsher penalties if warranted for findings of abuse or negligence.

The Technician should also be aware that both State and Federal laws may govern construction projects, including Title 18, United States Code, Section 1020, that in brief states that anyone making falsifications on Federal-aid projects,

"Shall be fined not more than $10,000 or imprisoned not more than five years, or both."

I,_____ , have read, understand, and agree to abide by the rights,

(print name)

responsibilities, and penalties associated with receipt of this **Certification**.

_____

Signature

_____

Date

WAQTC Sample

APPENDIX A

BYLAWS
OF
WESTERN ALLIANCE FOR QUALITY TRANSPORTATION CONSTRUCTION (WAQTC)

ARTICLE ONE

NAME, PURPOSE, and BENEFITS

The name of this organization is the Western Alliance for Quality Transportation Construction (WAQTC). Participation in this organization is voluntary; however, the membership recognizes the advantages of a unified effort leading to significant accomplishments.

WAQTC is focused in three main areas: standardizing test methods (WAQTC, AASHTO, and ASTM), certifying sampler / testers through the Transportation Technician Qualification Program (TTQP), and working together on national programs of significance including research, training, and technology deployment.

The organization's purpose is displayed by the following mission statement.

Provide leadership in the pursuit of continuously improving quality in transportation construction.

Through our partnership, we will:

- Provide leadership in the pursuit of continuously improving quality in transportation construction.
- Through our partnership, we will:
- Promote an atmosphere of trust, cooperation, and communication between government agencies and the private sector
- Respond in a unified and consistent manner to identify quality improvement needs and new technologies that impact the products that we provide,
- Provide a forum to promote uniform test standards,
- Provide highly skilled, knowledgeable materials sampling and testing technicians,
- Provide reciprocity opportunities for qualified testing technicians among Accredited Contributing Members.

Agencies with membership in the WAQTC have received large cost savings in the development and maintenance of the TTQP training materials. This cost savings is accomplished through sharing of personnel, while reducing materials duplication.

Partnering that takes place at both the executive and technical levels supplies each agency with needed data exchanges and valuable feedback of agency program management.

In today's environment of doing more with less and with the loss of knowledge through retirement, the sharing of technical expertise is critical.

With a limited work force, more requirements have been added to the contracting community. By having regional programs, the contractor saves in both time and money when working with multiple agencies.

ARTICLE TWO

ORGANIZATIONAL STRUCTURE

- Executive Board
    - Contributing Member
        - Accredited Contributing Members (TTQP)
    - Advisory member
    - Guest
- Transportation Qualification Program (TTQP) Committees
    - Qualification Advisory Committee (QAC)
    - Agency Qualification Committee (AQC)

ARTICLE THREE

EXECUTIVE BOARD

Section 1. Structure. The Executive Board is responsible for the mission, objectives, structure, policy decisions, the direction of the WAQTC, and other programs as may be undertaken in the future.

The Board is broken into two distinct membership groups: contributing members, with the subgroup of accredited contributing members; and advisory members. Membership will be comprised of at least one representative from the member organization. All members will have the responsibility of involving themselves in the operation and direction of the organization.

Agencies that have agreed to follow the standards of the TTQP accreditation program will have the status of Accredited Contributing Membership on the Executive Board.

Additional members such as suppliers, producers, the construction industry, consultants, academia, or FHWA Division office staff may serve as advisory members.

Section 2. Increase or Decrease in the Executive Board. A simple majority of the Board membership may increase or decrease the membership at any meeting of the Board.

Section 3. Term of Membership. Members may participate on the Board for whatever period is designated by their Agency or dictated by job function or business requirements. For the sake of uniformity and mission accomplishment, it will be expected that only those that can serve for longer

than one year will be appointed. When a member leaves the Board, the member Agency will appoint a replacement, either temporary or permanent, within two weeks.

Section 4. Meetings. The Board will meet at least once a year at a location as agreed to by a majority of the Board or required by the business at hand. Other meetings may be held as required to fulfill the mission, administer a task, or at the request of any Board member. Business may also be conducted through E-mail, conference or video calls, or other such means agreed to by the participant Agencies.

Section 5. Subcommittees. The Board may appoint subcommittees which will have and exercise such powers that the Board vests in them to accomplish an assignment. As noted previously, non-Agency parties may be asked to serve on these subcommittees in an advisory capacity. A majority of any such subcommittee may fix the time and place of its meetings and approve any action as the act of the subcommittee, if approved by the Board to do so. Any subcommittee, appointed by or acting under the Board, may develop its own general operating rules or procedures as required to accomplish their task as long as they are in harmony with the mission of the WAQTC.

Section 6. Quorum and Voting. It is the goal of this organization that all decisions are reached by a consensus of the members. When consensus cannot be reached, a vote of the membership is appropriate**,** the following criteria will apply: A majority of the Contributing Members of the Board or any subcommittee, acting at a meeting duly assembled, will constitute a quorum for the transaction of business. Each Contributing Member Agency will have one vote irrespective of the number of members it has on the Board or any subcommittee, except the FHWA members who will serve as ex officio and will not take part in voting. Only those members on the Board recognized as Accredited Contributing Members shall have a single vote on all operational matters of the TTQP.

If a member of the Board, or any subcommittee, cannot be present for a meeting, that Agency may appoint a replacement provided that the replacement has the authority to vote the Agency's position. When less than the total WAQTC Agency membership elects to enter into a project agreement in pursuit of an outcome that supports the mission, only those participating members will have voting rights concerning that particular project. The input of the non-participatory members will be considered in all decisions**.**

Section 7. Goals and Action Plans. The goals, and associated action plans, of the WAQTC may be altered at any meeting provided that all Agencies have been given the opportunity for input and have been apprised that it is the intent of the Board to alter these documents at such a meeting.

ARTICLE FOUR

OFFICERS

Section 1. General. Officers of the WAQTC will be from the membership of the Board, either by rotation or by election. There will be no designated term of office, unless expressly stated in the Bylaws. Other subcommittees, appointed by the Board or acting under the Board, may appoint the number and type of officers as required to accomplish their assigned or designated task. It is agreed that all member Agencies will attempt to share equally in these duties.

Section 2. Chair. The chair as of July 1, 2016, will be the Board representative from the Oregon Department of Transportation. Two years after this initial appointment the new Chair shall be the

existing Vice-Chair. Accepting the position is not mandatory; however, members have a responsibility to serve if able to do so. Should the prospective Chair decline the position, the Board may hold a special election. The length of a Chair's term will be two years. The Board may elect a Chair by simple majority of the Board members if it becomes necessary. The Chair duties include leading and coordinating Board meetings, overseeing the regular operation of consultant contracts and such additional powers and responsibilities as may from time to time be vested in him/her by the Board.

Section 3. Vice-Chair. The Vice-Chair as of July 1, 2016, will be the Board representative from Washington State Department of Transportation. After this initial appointment the role of the Vice-Chair will rotate among member states in alphabetical order. The Treasurer is not eligible to become Vice Chair. The Board may elect a Vice-Chair by simple majority of the Board members if it becomes necessary. The Vice-Chair will automatically assume the duties of the Chair after two years of service or in the event of the existing Chair's departure. The Vice-Chair will support the Chair as requested and will fill in for the Chair at meetings if the Chair is absent, and such additional powers and responsibilities as may from time to time be vested in him/her by the Board. The length of a Vice-Chair's term will be two years.

Section 4. Treasurer. The Treasurer position will be the Board representative from the pooled fund lead state. The Treasurer will be responsible for managing, tracking, and reporting the financial dealings of the Board, and such additional powers and responsibilities as may be vested in him/her by the Board. The Secretary-Treasurer will work with the Pooled Fund manager to ensure a true and accurate account of all financial transactions is kept. The Secretary-Treasurer will review and approve all expenses paid. On a quarterly basis, the Secretary-Treasurer will review expense and income statements provided by the Pooled Fund manager for accuracy. With the Secretary-Treasurer's assistance the Board will develop the operating budget. The Secretary-Treasurer will ensure that the Board retains a list showing the pooled fund status of all members. The Secretary-Treasurer will submit a semi-annual Report of the financial condition of the WAQTC pooled Fund to the Board.

Section 5. Coordinator. The Coordinator will be elected by a simple majority vote of the Board membership and will be responsible for meeting coordination, preparing agendas, the smooth operation of meetings and successful conduction of business, recording the major points, decisions, and action items during Board meetings, distributing these to members, and accumulating and maintaining all such notes, or related materials, for future reference, and such other responsibilities as directed by the Chair. This position may also be a contracted position.

Section 6. Copyright Officer. The Copyright Officer will be elected by a simple majority vote of the Board membership and will be responsible for receiving and evaluating permission requests, ensuring the permissions policy is followed, and coordinating permissions with member agencies. This position may also be a contracted position.

Section 7. Archivist. The Archivist will be and will be responsible for collecting, organizing, and making available historical information, publications, and documents, and performing historical research upon request. This position may also be a contracted position.

Section 8. Resignation. Any officer of the Board may resign at any time provided that two weeks' notice is given.

ARTICLE FIVE

ADMINISTRATIVE FUNCTIONS

Section 1. Administration of Tasks. It is agreed that each member Agency will share in the various administrative duties or committee tasks that are required in the support of the mission of the WAQTC.

Section 2. Funding. The entire membership, or division thereof wishing to participate, may enter into project agreements in support of the mission of the WAQTC. Participation in such projects is voluntary taking into consideration such factors as return on investment**.** Funding for projects, or other undertakings that support the mission, will be on a basis as agreed to by the member Agencies participating in that project. Business will be conducted through whatever mechanism is most advantageous such as: pooled fund studies, task reimbursement, or other inter-Agency agreements. The appropriate agreement will be drawn for the task at hand. This document will lay out the reason for the agreement and desired outcome, the projected cost, the amounts that each Agency will contribute and in what form, and the responsibilities and expectations of each party to the agreement**.**

ARTICLE SIX

EMBLEM

The emblem of the organization will be diamond shaped, bearing the inscription WESTERN ALLIANCE FOR QUALITY TRANSPORTATION CONSTRUCTION (WAQTC), and having an illustration of mountains bordered by graphical designs. The emblem may be placed on all products that result from the efforts of the WAQTC or that fall under its leadership.

ARTICLE SEVEN

CHANGES TO BYLAWS

These bylaws may be altered, amended, or repealed and new bylaws adopted at any meeting of the Board, by simple majority vote of Board Contributing Members. Furthermore, all Agencies must have been made aware of the intended change and given the opportunity to comment and be represented at that meeting.

ARTICLE EIGHT

CHANGES TO TTQP OPERATIONAL MATTERS

The TTQP Operational Agreement and Administration Manual may be altered, amended, or repealed and revisions or replacements adopted at any meeting of the Board, by simple majority vote of Board Accredited Contributing members. Furthermore, all Agencies must have been made aware of the intended change and given the opportunity to comment and be represented at that meeting.

APPENDIX B

OPERATIONAL AGREEMENT

WESTERN ALLIANCE FOR QUALITY TRANSPORTATION CONSTRUCTION (WAQTC) TRANSPORTATION TECHNICIAN QUALIFICATION PROGRAM (TTQP) AND THE QUALIFICATION ADVISORY COMMITTEE (QAC)

Background. The Transportation Technician Qualification Program (TTQP) is under the leadership of the Western Alliance for Quality Transportation Construction (WAQTC). The goal of the TTQP is to provide qualified materials testing technicians and uniformity and consistency in field sampling and testing procedures in order to improve the quality of the products that we provide. These tasks will be accomplished through a technician qualification program in the areas: Aggregate, Asphalt I and II, Concrete, Embankment & Base, In-Place Density, Embankment and Base and In-place Density, Self-Consolidating Concrete, and Sampling and Reduction. Upon successful completion of the requirements, a participant will be considered a Qualified Materials Testing Technician. In the pursuit of quality, it is agreed that the WAQTC may ask that qualification or certification requirements be developed for other areas or other quality improvement tasks be provided in the future.

Administration. Guidance on the day-to-day administration of the TTQP is contained in the WAQTC Administrative Manual. For the sake of continued reciprocity, uniformity, consistency, and the integrity of the program, all participating Agencies agree to conduct the program in accordance with the direction provided in this manual.

Name and Membership. The TTQP will have an oversight group referred to as the Qualification Advisory Committee (QAC). The QAC will consist of at least one representative each from the member Agencies of the WAQTC, who possesses knowledge in the materials field or other such area that the WAQTC feels will benefit the QAC. A cross section of suppliers, producers, the construction industry, consultants, academia, or FHWA Division office personnel may be asked to take part on an advisory basis.

The QAC will operate in conformance with the bylaws of the WAQTC and may elect officers or develop general tasks or operating procedures as needed to perform their function.

Requirements and Authority. The principal task of the QAC is to provide oversight of the TTQP. The QAC will act in an advisory capacity to the WAQTC Executive Board and will carry out tasks as assigned by the Executive Board. The QAC will meet yearly, or at any other time as is required, at a location to be agreed upon by the members. All recommendations of the QAC will require approval of the Executive Board. The QAC will review the TTQP, and all comments from that

year's participants as compiled by member Agencies, and determine any changes, deletions, or improvements that are needed in the program and in the instructional materials. The QAC will prepare a draft(s), if required, of the intended changes to the program and present it to the Executive Board for approval.

Upon approval the QAC will follow the guidelines for incorporation of these changes into the program as defined in the WAQTC Administrative Manual. The QAC will also make recommendations on additional qualifications or related undertakings that would help to accomplish the WAQTC mission. As part of their oversight duties, they, a subcommittee, or agent appointed by them, will review the administration of the TTQP in each member Agency in order to maintain the integrity of the program and the basis for technician reciprocity and assure conformance to the process. A review will be conducted after the first year of operation and at a minimum every three years thereafter. The results of the findings will be reported to the WAQTC Executive Board along with recommendations.

Program Revisions. The QAC will meet by August 30 of each year, or other such time as approved by the Executive Board, for the purpose of making program revisions or updates. Proposed changes will be drafted and those approved will be incorporated into the TTQP no later than October 1 of the year in which the changes were adopted.

Expenses, Funding, and Responsibilities. Member Agencies agree to participate in any oversight, review, developmental, or administrative requirements, except as defined elsewhere in this section. The Agencies agree that participation in the normal business of the TTQP and the duties required of the QAC as an oversight group will be subsidiary to each Agency's normal operating budget. Funding for yearly operating expenses of the TTQP, if required, such as updates or additions to master copies of program products and materials, or to accomplish other essential tasks, considered beyond the basic oversight function of the QAC, will be shared among the WAQTC members. Each member will be solely responsible for the cost of implementing such updates, changes, or additions within their respective Agencies. If participating Agencies elect to collaborate in order to obtain more cost-effective pricing for the services required to effect program changes to individual Agency products or materials, the cost will be prorated among the Agencies in accordance with the respective services requested by each. Purpose, cost, and responsibilities will be defined by written agreement.

If an Agency is unable to meet its participation or funding responsibilities, the Agency's Executive Board member must notify the Chair in writing if the Agency wishes to continue to be recognized as an Accredited Contributing Member per Section 6 of the WAQTC bylaws. When payment or obligation is due, the remaining Executive Board members will meet and vote on the agency's request. The Executive Board will review the circumstances at least annually and determine an appropriate course of action. The Executive Board's decision may include temporary accommodations, adjusted responsibilities, or other measures deemed reasonable.