



Field Sampling and Testing Qualification Program

September 2021

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The Personnel Qualification Program for Field Sampling & Testing has been developed for the purpose of qualifying persons in the sampling and testing methods for which they have demonstrated the knowledge and ability to properly perform the procedures required by those methods. The Materials Testing and Research Branch (MTRB) has partnered with the local Concrete and Cement Product Industry (CCPI) and American Concrete Institute (ACI) Concrete Unit of the Field Sampling and Testing Qualification Program (FSTQP). The Soils and Aggregate Unit will be conducted by personnel from the MTRB. The certification training will be held at the MTRB, 2530 Likelike Highway, Honolulu, Hawaii 96819.

Concrete Unit: September 8-10, 2021 – Government Agency – State & County Personnel

Asphalt Unit: September 13-17, 2021

Soils & Aggregate Unit: September 20-24, 2021

Neighbor Islands Personnel have first priority

Notes:

1. Personnel arriving late for the Exams will not be allowed to take the written or performance exam forfeits their application fees and will have to be rescheduled for the next set of examinations.
2. Personnel with expired qualification must be re-qualified in order to perform field sampling and testing of materials on all Hawaii Department of Transportation (HDOT) Highway construction projects.
3. In the event a participant with qualification time remaining from their previous examination for the Asphalt Unit, the Concrete Unit, or the Soils and Aggregate Unit fails the September 2021 qualification examination for any of those Units, the participant will lose their qualification time remaining for the Units that the participant failed. Qualification time remaining does not accumulate; qualification is only good for five years.
4. The Transportation Personnel Qualification Program recognizes the ACI and Western Alliance for Quality Transportation Construction (WAQTC) on case by case basis of certification programs for technicians performing sampling and testing activities on Portland cement concrete. The Grade I ACI Concrete Field Testing Technician Certification or WAQTC Concrete Testing Technician Qualification is required by all personnel for Portland cement concrete sampling and testing on HDOT projects.



Concrete Unit

September 8-10, 2021 - Concrete Module via CCPI / ACI (Max. 10 persons)

September 8th (Wed) 8:00 a.m. - 3:00 p.m.	Hands-on Practice (In person at HWY-L)
September 9th (Thurs) 8:00 a.m. - 3:00 p.m.	Classroom Training (Virtual)
September 10th (Fri) 8:00 a.m. - 3:00 p.m.	Written & Practical EXAM (In person at HWY-L)

Upon satisfactory completion of ACI Certification, please E-mail a copy of your certificate to: lance.t.nakano@hawaii.gov

Asphalt Unit

September 13-17, 2021 – Asphalt Module (Max. 25 persons)

September 13th (Mon) 8:00 a.m. - 3:00 p.m.	Classroom Training (Virtual)
September 14th (Tues) 8:00 a.m. - 3:00 p.m.	Written/Verbal EXAM (In person at HWY-L)
September 15th (Wed) 8:00 a.m. - 3:00 p.m.	Written/Verbal EXAM (In person at HWY-L)
September 16th (Thurs) 8:00 a.m. - 3:00 p.m.	Written/Verbal EXAM (In person at HWY-L)
September 17th (Fri) 8:00 a.m. - 3:00 p.m.	Written/Verbal EXAM (In person at HWY-L)

Soils & Aggregate Unit

September 20-24, 2021 – Soils and Aggregate/Sand Cone Module (Max. 24 persons).

September 20th (Mon) 8:00 a.m. - 3:30 p.m.	Classroom Training (Virtual)
September 21st (Tues) 7:00 a.m. – 11:00 a.m.	(In person at HWY-L) Hands-on Practice
12:00 p.m. – 4:00 p.m.	Written & Performance EXAM
September 22nd (Wed) 7:00 a.m. – 11:00 a.m.	(In person at HWY-L) Hands-on Practice
12:00 p.m. – 4:00 p.m.	Written & Performance EXAM
September 23rd (Thurs) 7:00 a.m. – 11:00 a.m.	(In person at HWY-L) Hands-on Practice
12:00 p.m. – 4:00 p.m.	Written & Performance EXAM
September 24th (Fri) 7:00 a.m. – 11:00 a.m.	(In person at HWY-L) Hands-on Practice
12:00 p.m. - 4:00 p.m.	Written & Performance EXAM

Exam & Registration Information

THE EXAMINATION

The one or two-part (written and performance) examination will include the following test methods:

Bituminous (Asphalt) Materials Unit

1. AASHTO R66 – Sampling Bituminous Materials
2. AASHTO R97 – Sampling Bituminous Paving Mixtures

Soils and Aggregate Materials Unit

1. AASHTO T2 – Sampling Aggregates
2. Hawaii HDOT TM1 – Density of Soil In-Place by the Sand Cone Method
3. Hawaii HDOT TM3 – Field Determination of Moisture Contents in Soils

Concrete Materials Unit (ACI)-State and County Personnel Only

1. AASHTO T23, ASTM C31 – Making and Curing Concrete Specimens in the Field
2. AASHTO T119, ASTM C143 – Slump of Hydraulic Cement Concrete
3. AASHTO R60, ASTM C172–Sampling Freshly Mixed Concrete
4. AASHTO T309, ASTM C1064 – Temperature of Freshly Mixed Hydraulic Cement Concrete
5. AASHTO T121, ASTM C138 – Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
6. AASHTO T152, ASTM C231 – Air Content of Freshly Mixed Concrete by the Pressure Method
7. AASHTO T196, ASTM C173 – Air Content of Freshly Mixed Concrete by the Volumetric Method

REGISTRATION FOR EXAMINATIONS

To register for the Asphalt and Soils and Aggregate qualification examinations, complete forms (HDOT-TPQP-1 and HDOT TPQP-2) and mail the forms with your check to:

Materials Testing and Research Branch
Attn: FSTQP – Lance Nakano
2530 Likelike Highway
Honolulu, Hawaii 96819-2928

Make checks payable to:

Hawaii Department of Transportation

Note: Registration is free for Highways and County personnel.

Study guides will be sent out once registration is **CLOSED**. Study guides with sampling and testing methods will be provided for all units (Asphalt, Concrete & Soils).

MTRB will email the study guide for the Soils & Aggregate Unit.

Concrete study guides will be mailed to Government Personnel Only.

DEADLINE: Registration form and payment must be received to the MTRB by 4:30 p.m., Thursday, August 19, 2021.

Last day to cancel for refund is Thursday, August 19, 2021.

To request cancellation and a refund, please contact Lance Nakano at (808) 832-3405 ext. 115 or email at lance.t.nakano@hawaii.gov.

If you have any questions on the registration, please contact Lance Nakano at (808) 832-3405 ext. 115 or email at lance.t.nakano@hawaii.gov.

If you have any questions on the Field Sampling and Testing Qualification Program (FSTQP) or Independent Assurance (IA) Program, please contact Ms. Carla Belaski at (808) 832-3405 ext. 113 or email at carla.l.belaski@hawaii.gov.

Examination Procedures

Field Sampling and Testing

Qualification Program

QUALIFICATION REQUIREMENTS

1. Participants who have passed both the written and performance examinations for the test methods in the Asphalt Unit, the ACI Concrete Unit, or the Soils and Aggregates Unit will be qualified for that unit, and a certificate with their qualifications will be email to the participant.
2. Failure in either the written examination or the performance examination of a test method in the Asphalt Unit, the ACI Concrete Unit, or the Soils and Aggregate Unit will constitute failure to qualify for the unit in which the failure occurred.
3. Participants with time remaining on their existing qualification will forfeit their qualification time remaining for the units in which the participants failed to obtain qualification through the September 2021 examination.

WRITTEN EXAMINATION

1. Closed book exam.
2. Questions will not be allowed during the examination.
3. Asphalt Unit will not provide pencils/calculators for the examination. Phones are not allowed to be used during the examination.
4. The examination may be online or paper. The examiner will collect all examination papers and used scratch paper.
5. Participant must pass with a minimum score of 70% on each test method. ACI requires 60% minimum score on each test method, and 70% minimum combined score to pass.
6. For the Asphalt Unit, the participant must pass the written exam with 50% or more of the test methods in a unit in order to continue with the performance exam. For Soils and Aggregate Unit and Asphalt Unit, the participant will be allowed one retake of the written exam for the test methods that the participant failed. If the participant of Soils and Aggregate Unit initially fails two or more test methods, the individual fails the written exam. For the ACI Concrete Unit, a retake of the written exam is allowed regardless of score. ACI Concrete Unit written examination is graded by ACI and will take approximately 4 weeks for results; performance exam will not be affected by written exam.

7. If the participant fails the written retest exam for any of the three units, the participant will not obtain qualification for that unit. They will have to wait until the next qualification program in March 2022.

PERFORMANCE EXAMINATION

1. Closed book exam.
2. Coaching from the examiner will not be allowed during the examination.
3. Each examination shall be completed within the time limit designated for that test method.
4. The participant may be required to verbally describe material sampling procedures if performance of the method is not practical or feasible.
5. The participant shall perform all of the required procedures for each test method. Omission of one or more of the required procedures for a test method will constitute failure of that test method. The Examiner may allow certain procedures to be accelerated. Inability to complete the test procedures within the designated time limit will constitute a failure of the test method. ACI allows for two trials on each of the test methods.
6. If the participant notices an error that was made during the performance of the test method, the participant will be allowed one restart for each test method.
7. The participant must pass the performance exams for 50% or more of the test methods in a unit to continue with the examination for that unit.
8. If the participant passes 50% or more of the test methods in a unit, the participant will be allowed one retake of the performance exams for the test methods that the participant failed in that unit. Failure of a performance exam retake for any of the test methods in a unit is failure to obtain qualification for that unit.
(ACI may differ slightly in implementation of the process.)

Hawaii Transportation Personnel Qualification Program Registration Form

Deadline: August 19, 2021

Check one:

☐ Initial Qualification

☐ Renewal of Qualification

PARTICIPANT CONTACT INFORMATION

Name: _____ Phone: _____

Position Title: _____ Bargaining Unit: _____

E-mail Address: _____ Office HWY _____

Employer's Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

If Participant's employer is making class arrangements, please include the following information.

Contact Name: _____ Phone: _____

Contact E-mail Address: _____

Study Guides: E-mail only

NOTE:

Participants should bring their own pocket calculator, pen, and pencils. Phones are not allowed to be used during the examination.

Appropriate wear (no shorts) is recommended, and shoes are required during practical examinations.

Due to the pandemic, refreshments and lunch will NOT be provided.

**First priority will be for participants who are expiring soon followed by first come, first served.

DESIRED QUALIFICATIONS

☐ Bituminous (Asphalt) Unit \$200

☐ Soils & Aggregate Unit \$300

☐ ACI Concrete Unit (Government Personnel Only)

Examination Fee

Funded

TOTAL

Office use only:

Check #: _____ Study Guides: _____

Amount: _____ Certificates: _____

Transportation Personnel Qualification Program (TPQP)

Qualification carries inherent rights and responsibilities. These rights include being exclusively sanctioned along with others so qualified by TPQP 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 individual in accordance with the required test procedures. By signing this document, the individual agrees to abide by all of the terms of the TPQP and as set forth by the contracting agency.

RIGHTS AND RESPONSIBILITIES AGREEMENT

This document affirms that _____ hereinafter
(print name)

the applicant, desires to be qualified by the Transportation Personnel Qualification

Program (TPQP) in the: ☐ Bituminous (Asphalt) Unit
☐ Soils & Aggregate Unit
☐ ACI Concrete Unit (Government Personnel Only)

The applicant should also be aware that both State and Federal laws may govern construction projects, including Title 18, United State 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, responsibilities, and penalties associated with receipt of this qualification.

Signature

Date

Highways Division

State of Hawaii Department of Transportation

Highways — Materials Quality Assurance Program

The Materials Quality Assurance (QA) Program represents the Hawaii Department of Transportation, Highways Division's recognition of its responsibility and commitment to ensure that materials incorporated into highway construction projects conform substantially to requirements of the plans and specifications. This program provides uniform, statewide procedures to ensure personnel can perform materials sampling and testing in accordance with test methods used in the program.

All personnel performing field sampling and testing of materials for all State Highway construction projects (Federal & State funded) and all County Federal-Aid projects on the National Highway System (NHS) shall be qualified per the QA Program's Personnel Qualification Program of the QA Manual for Materials. In accordance with Title 23 CFR, Part 637, the sampling and testing has to be performed by qualified sampling and testing personnel.

Personnel must successfully pass a two-part (written and performance) examination to become qualified to perform field sampling and testing of materials for all State Highways construction projects and all County Federal-Aid projects on the NHS.

Personnel who successfully pass the two-part examination for the unit (e.g. Asphalt, Soils & Aggregate, and Concrete) will receive a 5-year qualification certificate for that unit. All qualified personnel must requalify every 5-years. To requalify for another 5-years, personnel must successfully pass the two-part examination for the unit they are applying for recertification.

Personnel who are certified and are actively performing field sampling and testing of materials on various State Highways construction projects and all County Federal-Aid projects on the NHS, shall participate in the MTRB's Independent Assurance (IA) Program on an annual basis.

The purpose of the IA program is to provide uniform, statewide procedures to ensure personnel qualified under the TPQP remain capable of performing sampling and testing correctly and to ensure testing equipment is checked and calibrated.

Personnel from the MTRB will schedule the annual IA evaluation with the QA Officer at the four Highways District Offices (Oahu, Hawaii, Maui, and Kauai). If you have any questions concerning the program, please contact Lance Nakano at (808) 832-3405 ext. 115 or email lance.t.nakano@hawaii.gov.



Materials Testing and Research Branch
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