

# Field Sampling and Testing Qualification Program

**September 11, 2024**  
to  
**October 4, 2024**

# Field Sampling and Testing Qualification Program

September 11, 2024  
to  
October 4, 2024

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 Asphalt, Soils and Aggregate Units 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 11 – September 13, 2024 – Government Agency – State & County Personnel-Only**

**Asphalt Unit: September 16 – September 20, 2024**

**Soils & Aggregate Unit: September 23 – October 4, 2024**

**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 and FHWA funded city and county 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 2024 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 Certification of Concrete Field Testing Technician – Grade I for performing sampling and testing activities on Portland cement concrete, and is required by all personnel for Portland cement concrete sampling and testing on HDOT projects. Certification under the Western Alliance for Quality Transportation Construction (WAQTC) concrete Testing Technician Qualification may be recognized on case-by-case basis



## Concrete Unit

### September 11 – September 13, 2024 - Concrete Module via CCPI / ACI (Max. 10 persons)

<b>September 11<sup>th</sup> (Wed.)</b> 8:00 a.m. - 3:00 p.m.	Hands-on Practice (In person at HWY-L)
<b>September 12<sup>th</sup> (Thurs.)</b> 8:00 a.m. - 3:00 p.m.	Classroom Training (In person at HWY-L)
<b>September 13<sup>th</sup> (Fri.)</b> 8:00 a.m. - 3:00 p.m.	Written & Practical EXAM (In person at HWY-L)

Upon satisfactory completion of ACI Certification, please email a copy of your certificate to: [Kimberly.T.Gordian@hawaii.gov](mailto:Kimberly.T.Gordian@hawaii.gov)

## Asphalt Unit

### September 16 – September 20, 2024 – Asphalt Module

<b>September 16<sup>th</sup> (Mon.)</b> 9:00 a.m. - 11:00 a.m.	Classroom Training (Virtual)
<b>September 17<sup>th</sup> (Tues.)</b> 8:00 a.m. - 3:00 p.m.	Written/Verbal EXAM (In person at HWY-L)
<b>September 18<sup>th</sup> (Wed.)</b> 8:00 a.m. - 3:00 p.m.	Written/Verbal EXAM (In person at HWY-L)
<b>September 19<sup>th</sup> (Thurs.)</b> 8:00 a.m. - 3:00 p.m.	Written/Verbal EXAM (In person at HWY-L)
<b>September 20<sup>th</sup> (Fri.)</b> 8:00 a.m. - 3:00 p.m.	Written/Verbal EXAM (In person at HWY-L)

**MTRB may revise starting time of Hands-on Practice, Written & Performance Exam as needed and confirmed with participants during scheduling.**

# Soils & Aggregate Unit & E-Gauge Unit

## September 23 – October 4, 2024 – Soils and Aggregate/Sand Cone Module

<b>September 23<sup>rd</sup> (Mon.)</b> 8:00 a.m. - 4:30 p.m.	Classroom Training of Soils and Aggregate/Sand Cone Module, and E-Gauge (Virtual)
<b>September 24<sup>th</sup> (Tues.)</b> 8:00 a.m. – 4:30 p.m.	Hands-on Practice, Written & Performance EXAM (In person in HWY-L)
<b>September 25<sup>th</sup> (Wed.)</b> 8:00 a.m. – 4:30 p.m.	Hands-on Practice, Written & Performance EXAM (In person in HWY-L)
<b>September 26<sup>th</sup> (Thurs.)</b> 8:00 a.m. – 4:30 p.m.	Hands-on Practice, Written & Performance EXAM (In person in HWY-L)
<b>September 27<sup>th</sup> (Fri.)</b> 8:00 a.m. – 4:30 p.m.	Hands-on Practice, Written & Performance EXAM (In person in HWY-L)
<b>September 30<sup>th</sup> (Mon.)</b> 8:00 a.m. – 4:30 p.m.	Hands-on Practice, Written & Performance EXAM (In person in HWY-L)
<b>October 1<sup>st</sup> (Tues.)</b> 8:00 a.m. – 4:30 p.m.	Hands-on Practice, Written & Performance EXAM (In person in HWY-L)
	<b>Priority given to participants travelling to Oahu only</b>
<b>October 2<sup>nd</sup> (Wed.)</b> 8:00 a.m. – 4:30 p.m.	Hands-on Practice, Written & Performance EXAM (In person in HWY-L)
<b>October 3<sup>rd</sup> (Thurs.)</b> 8:00 a.m. – 4:30 p.m.	Hands-on Practice, Written & Performance EXAM (In person in HWY-L)
<b>October 4<sup>th</sup> (Fri.)</b> 8:00 a.m. – 4:30 p.m.	Hands-on Practice, Written & Performance EXAM (In person in HWY-L)

# 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 Asphalt Materials
2. AASHTO R97 – Sampling Asphalt Mixtures

**Soils and Aggregate Materials Unit (Participants will be certified to perform the following test methods, but the training does not include training on operating nuclear gauge or certification on hazardous material transportation to fulfil US DOT 49 CFR 172, subpart H Hazmat.)**

1. AASHTO R 90 – Sampling Aggregates
2. AASHTO T 310 In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
3. Hawaii HDOT TM1 – Density of Soil In-Place by the Sand Cone Method
4. Hawaii HDOT TM3 – Field Determination of Moisture Contents in Soils

**E-Gauge Unit (The training does not include training on operating nuclear gauge or certification on hazardous material transportation to fulfil US DOT 49 CFR 172, subpart H Hazmat.)**

1. ASTM D8617 – Standard Test Method for In-Place Bulk Density of Soil and Soil-Aggregate by a Low-Activity Nuclear Method (Shallow Depth)
2. Dielectric Measurement of Moisture Content Determination Method

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

1. AASHTO R100, 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, Soils and Aggregate, E-Gauge, ACI Concrete qualification examinations, complete online forms:](#)

[HDOT-TPQP-1 and HDOT TPQP-2](#)

[\(Click the link to complete the forms\)](#)

Send your check to the address below:

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

Please send checks per participant, per unit.

Make checks payable to:

**Hawaii Department of Transportation**

Note: Registration is free for State and County personnel. **Seats will be confirmed once payment has been received.**

Study guides will be emailed 2 weeks before class. Study guides with sampling and testing methods will be provided for Asphalt & Soils. 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., Friday, August 23, 2024.**

Last day to cancel for refund is Friday, August 23, 2024.

To request cancellation and a refund, please contact Carla Belaski at (808) 832-3405 ext. 113 or email at [carla.l.belaski@hawaii.gov](mailto:carla.l.belaski@hawaii.gov)

If you have any questions on the registration, please contact Carla Belaski at (808) 832-3405 ext. 113 or email at [carla.l.belaski@hawaii.gov](mailto:carla.l.belaski@hawaii.gov)

If you have any questions on the Field Sampling and Testing Qualification Program (FSTQP) or Independent Assurance (IA) Program, please contact Ms. Kimberly Gordian at (808) 832-3405 ext. 115 or email at [Kimberly.T.Gordian@hawaii.gov](mailto:Kimberly.T.Gordian@hawaii.gov) or Ms. Carla Belaski at (808) 832-3405 ext. 113 or email at [carla.l.belaski@hawaii.gov](mailto: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, the Soils and Aggregates Unit, or E-Gauge 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, the Soils and Aggregate Unit, or E-Gauge 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 2024 examination.

### WRITTEN EXAMINATION

1. Closed book exam. Questions will not be allowed during the examination.
2. Asphalt Unit will not provide pencils/calculators for the examination. Phones are not allowed to be used during the examination.
3. The examination may be online or paper. The examiner will collect all examination papers and used scratch paper.
4. 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. Participants must pass with a minimum score of 50% on General Knowledge Section in Soils and Aggregate Unit.
5. For the Asphalt Unit, the participant must pass the written exam on one or more of the test methods in order to continue with the exam. For Soils and Aggregate Unit, E-Gauge 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, refer to examination section in the technician workbook or contact CCPI-HI. ACI written examination is graded by ACI and may take several weeks for results; performance exam will not be affected by written exam.

6. If the participant fails the written retest exam for any of the three units, the participant will not obtain qualification for that unit. Participants will have to wait until the next scheduled qualification program.

### 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. For the ACI Concrete Unit, refer to examination section in the technician workbook or contact CCPI-HI.
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.

For the ACI Concrete Unit, refer to examination section in the technician workbook or Contact CCPI-HI.

# 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 successfully pass the two-part examination for E-Gauge Unit also needs to pass HAZMAT training to receive 3-year HAZMAT certification and a valid certificate on Soils & Aggregate prior to receive a 5-year qualification certificate for E-Gauge unit. Personnel must provide valid HAZMAT certification to MTRB for maintaining qualified E-Gauge Operator status. Without valid HAZMAT certification or Soils & Aggregate certification, MTRB will suspend E-Gauge certification.

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.

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 Kimberly Gordian at (808) 832-3405 ext. 115 or email at: [Kimberly.T.Gordian@hawaii.gov](mailto:Kimberly.T.Gordian@hawaii.gov).

Materials Testing and Research Branch  
Hawaii Department of Transportation Highways  
2530 Likelike Highway  
Honolulu, Hawaii 96819 – 2928