

# JOINT TRAINING & CERTIFICATION PROGRAM



Code of Federal Regulations (CFR) Title 23, Section 637 Subpart B requires all sampling and testing data used in the acceptance decision or the Independent Assurance program be performed by qualified sampling and testing personnel. Currently, training for testing personnel varies among the Caltrans districts, contractors and consultants. Some have a formal (or informal) training program followed up by on-the-job training (OJT) while others use OJT exclusively. This training is typically internal to each Caltrans district, contractor or consultant. Certification is performed by Independent Assurance (IA) staff through proficiency testing which may include a combination of written and practical examination on a person by person basis.

To make the certification process more efficient and to ultimately obtain consistent, reliable, quality testing through joint training; Caltrans, local agencies, and industry has established a joint training and certification program (JTCP). The need to build a proficient workforce to efficiently manage an ever increasing workload is highlighted with the passing of SB1. Through the JTCP, testing technicians receive training, gain proficiency and become certified to sample and test highway construction materials. The JTCP offers training and certification in hot mix asphalt (HMA), soils and aggregates (S/A), and portland cement concrete (PCC) through the four modules identified below. Training and certification through JTCP is required for all technicians to receive or maintain certification in the test methods offered through these modules (some exceptions apply, see JTCP FAQ's).

## **Hot Mix Asphalt I (HMA I)**

| <u>Test Method</u> | <u>Name/Description</u>      |
|--------------------|------------------------------|
| CT 105             | Calculations - Gradings      |
| CT 125             | Sampling (HMA / Soil & Agg.) |
| AASHTO T 11        | Sieve Analysis (Washing)     |
| AASHTO T 27        | Sieve Analysis               |
| AASHTO T 176       | Sand Equivalent              |
| AASHTO R 76        | Reducing Samples of Agg.     |
| AASHTO T 255       | Evaporable Moisture Content  |
| AASHTO T 329       | Moisture Content (Oven)      |
| AASHTO T 335       | Percentage of Fracture       |
| AASHTO R 47        | Reducing Samples of HMA      |

## **Hot Mix Asphalt II (HMA II)**

| <u>Test Method</u> | <u>Name/Description</u>         |
|--------------------|---------------------------------|
| AASHTO T 166       | Bulk SpG of Compacted HMA - SSD |
| AASHTO T 209       | Max SpG and Density - HMA       |
| AASHTO T 269       | Percent Air Voids - HMA         |
| AASHTO T 275       | Bulk SpG - HMA                  |
| AASHTO T 308       | AC Content (Ignition Oven)      |

## **Soils and Aggregate (S & A)**

| <u>Test Method</u> | <u>Name/Description</u>        |
|--------------------|--------------------------------|
| CT 105             | Calculations - Gradings        |
| CT 125             | Sampling (Soil & Agg.)         |
| CT 201             | Sample Preparation             |
| CT 202             | Sieve Analysis                 |
| CT 205             | Percent Crushed Particles      |
| CT 216             | Relative Compaction            |
| CT 217             | Sand Equivalent                |
| CT 226             | Moisture Content (Soil & Agg.) |
| CT 227             | Cleanliness Value              |
| CT 229             | Durability                     |

## **Portland Cement Concrete (ACI Field Tech.-Grade I)**

| <u>Test Method</u> | <u>Name/Description</u>         |
|--------------------|---------------------------------|
| ASTM C1064         | Temperature of Concrete         |
| ASTM C172          | Sampling (Concrete)             |
| ASTM C143          | Slump                           |
| ASTM C138          | Density, Yield, and Air Content |
| ASTM C231          | Air Content (Pressure)          |
| ASTM C173          | Air Content (Volumetric)        |
| ASTM C31           | Making / Curing Specimens       |

## **Key Benefits**

- Efficient “one stop” training and certification of testing technicians
- Obtain consistent, reliable, quality testing
- Reduce material testing construction contract claims



Questions? Contact the JTCP at [JTCP@dot.ca.gov](mailto:JTCP@dot.ca.gov)

Additional JTCP information: <http://www.dot.ca.gov/mets/jtcp/>