

# QC/QA Field Laboratory Testing - Covid-19 Outbreak

## General Information

- Only authorized testing personnel (QC & QA) allowed in the laboratory
- Test results including raw data provided electronically
- Utilize appropriate PPE such as disposable gloves and face masks
- Have a station available for washing hands
- Have cleaning supplies available for wiping down equipment and countertops
- Do NOT share oven gloves for handling hot pans and/or molds
- To keep QC and QA testing from occurring at the same time, add a predetermined value (e.g. 50, 100 or 200 tons) to the QA tonnage sample location. If this method is not effective, relocate the QA sample location between the QC samples. Select an area that is representative of the overall mat. **Please note, if the QA sample is located by this procedure the data cannot be incorporated into the payfactor sheet (i.e. n=5).** Continue to use the randomly determined off-set value.

## Social Distancing Options

Try utilizing Option No. 1 first. If Option No. 1 is not feasible, try Option No. 2. If the contractor expresses concerns with individuals touching the equipment or the number of self-tests and QC tests being performed will not permit enough time for QA purposes, then try Options No. 3 or No. 4.

**Option No. 1** - While in the laboratory maintain six feet distance from other testing technicians

**Option No. 2** - QC and QA testing technicians alternate using the laboratory to perform necessary testing

**Option No. 3** – Utilize the split of the QC sample obtained from the same subplot the QA sample is being taken from

- Witness the QC sample being taken from the randomly determined roadway location
- Witness QC personnel splitting and determining the percent asphalt content and compacting two gyratory pucks
- Can witness the process (splitting & testing) in person by maintaining six feet distance from QC personnel or by utilizing a video system such as a smartphone (i.e. face time) or GoPro
- QC personnel shall provide a print out for **the** asphalt content determination and **provide** the gyratory height sheets for each specimen
- QA will obtain from QC the remaining mix, the two compacted pucks, and the material remaining after binder ignition oven testing (if performed)
- QA personnel will determine the bulk specific gravity of the two gyratory pucks, the maximum specific gravity, and the gradation
- Obtain QA sample from randomly determined location. Retain the sample **at a secure location**
- Every 10,000 tons randomly select a retained QA sample and submit it to the Central Laboratory for testing (compact two gyratory pucks and maximum specific gravity). Percent asphalt content will be determined using the binder ignition oven, if being **utilized** by QC (**MoDOT will use QC calibration factor**). Percent asphalt content cannot be determined using the nuclear asphalt content gauge. Testing will need to be conducted in the QC/QA field laboratory, either by QC or QA personnel
- Critical to retain extra material incase issues arise

**Option No. 4** - QA sample obtained by MoDOT personnel and tested by QC technician

- QA personnel will obtain randomly determined QA sample from the roadway
- Witness QC personnel splitting and testing the material in the laboratory
- Can witness the process (splitting & testing) in person by maintaining six feet distance from QC personnel or by utilizing a video system such a smartphone (i.e. face time) or GoPro

- QC personnel shall provide a print out for **the** asphalt content determination and **provide** the gyratory height sheets for each specimen
- **Untested material shall be retained. Remaining mix shall place in loose mix boxes and provided to QA. Samples should be stored at a secure location**
- Every 10,000 tons **randomly select a retained QA sample and submit it** to the Central Laboratory for testing (compact two gyratory pucks and maximum specific gravity). Percent asphalt content will be determined using the binder ignition oven, if being **utilized** by QC (**MoDOT will use QC calibration factor**). Percent asphalt content cannot be determined using the nuclear asphalt content gauge. Testing will need to be conducted in the QC/QA field laboratory, either by QC or QA personnel
- Critical to retain extra material incase issues arise

**Note:** To maintain the integrity of the QC/QA process, it is important that independent QA samples continue to be tested by MoDOT personnel.