NTPEP Asphalt Release Agent (ARA) QCQA Plan

April 2019

The QCQA Plan for Asphalt Release Agents (ARA) involves dual responsibilities and testing from the manufacturers and NTPEP’s testing laboratory. The manufacturers are responsible for the research and development (R&D) and any subsequent Quality Control (QC) testing that will guarantee the products to meet the requirements of the NTPEP ARA Work Plan. The NTPEP testing laboratory will perform Quality Assurance (QA) tests to verify each product’s compliance with the requirements of the NTPEP Work Plan. As product information is placed in NTPEP’s DataMine system, the individual State DOTs are responsible for final acceptance in the field.

The following sections provide additional details to ensure adequate QCQA for this program:

Manufacturer Quality Control for Product Evaluation

The testing lab used by the manufacturer shall have certifications and accreditations. All equipment is to be calibrated, verified or checked according to the lab quality system manual and ASTM, AASHTO or lab test methods. The testing lab shall have applicable standards available to technicians testing asphalt release agents for the NTPEP program and shall verify that the correct versions of applicable standards are being used per the appropriate NTPEP Asphalt Release Agent work plan.

To ensure accuracy and precision in lab testing and field evaluation data collection, the following controls have been instituted in this work plan:

- Technicians conducting asphalt release agent testing shall undergo a training program on methods, procedures and practices detailed in this work plan. Training records shall be documented per the lab QSM.

- Asphalt release agents shall be tested according to AASHTO T383.

Test Validation

The laboratory shall develop and maintain a standard operating procedure for each test performed for the AASHTO/NTPEP. All tests shall be performed with the appropriate number of replicates detailed in AASHTO T383. The report shall include the individual results for each replicate and the calculated mean. If a statement of precision is included in the test method the reported data shall meet the stated values.
Data Validation

In order to ensure the quality of data reported from the testing program there shall be a detailed procedure within the laboratories’ quality management plan describing the review and validation procedure for test results obtained from individual evaluation procedures. At a minimum, all data shall have a detailed review within the laboratory by supervisory staff prior to release to the manufacturer or the lead state. This review shall be noted in the quality control records and if changes are made to the data prior to report, the change and reason shall be noted.

Facilities Certification and Personnel Qualification

A detailed record of personnel training and education shall be maintained by the testing facility. This organizational record shall include supervisory personnel within the laboratory and provide the appropriate continuing education and evaluations related to the testing program.

Testing proficiencies of all technicians shall be evaluated and documented by the laboratory Quality Control Manager. These evaluations shall be performed at twelve-month intervals unless the technician does not routinely perform the test. In this case, proficiency of the technician shall be evaluated and documented prior to testing for this program.