



**QUALIFIED PRODUCTS POLICY
FOR WARM MIX ASPHALT ADDITIVES AND FOAMING PROCESSES
(QUALIFIED PRODUCTS LIST 77)**

GENERAL

The procedures described in this policy provide necessary steps to qualify a warm mix asphalt water foaming process or a warm mix asphalt additive per SC-M-408 for use in Department work. The steps listed below are required to be considered for the Qualified Product Listing (QPL). Processes and additives will be allowed only from producers that appear on SCDOT QPL 77.

INITIAL LISTING OF WARM MIX ASPHALT PROCESSES & ADDITIVES

Any manufacturer of a chemical additive that has a product that it desires to be listed on QPL 77 must successfully complete the product evaluation by the AASHTO Product Evaluation and Audit Solutions Asphalt Mixture Additives (AMA) Program. For more information on this qualification program, visit the AASHTO website at <https://transportation.org/product-evaluation-and-audit-solutions/>.

If the WMA additive was originally submitted under QPL 104 as a liquid anti-strip additive (LASA), send a request to the contact person below for possible inclusion on QPL 77.

Manufacturers of foaming units are required to submit their test data for two SCDOT Intermediate B mix designs using different aggregate sources. The test data must include a minimum of 3 gyratory specimens made at optimum binder content showing that % Air Voids, %VMA, and % VFA meet SC-M-402, along with a minimum of four ITS specimens demonstrating passing results according to 401.2.3.4 of the Standard Specifications. Alternate data can be submitted if independent research has been completed showing their product will provide a product that meets SCDOT requirements as stated in this Policy.

Once AASHTO test results have been published and found compliant, send a copy of the test results (additives) or required submission test data (foaming units) along with a request for inclusion on QPL 77 to:

Kimberly R. Lyons, Ph.D., P.E.

LyonsKR@scdot.org

Asphalt Materials Engineer

SCDOT Office of Materials and Research

(803)737-6700

The request must include the name of an asphalt contractor and asphalt binder terminal (chemical only) listed on QPL 37 willing to use the foaming system or terminally blend a finished WMA product. SCDOT will use the AASHTO evaluation results to make an initial decision whether the chemical additive is deemed acceptable for use. If the review finds the submitted AASHTO evaluation results to be acceptable, the manufacturer will be placed on QPL 77.

Once Contractor asphalt mix designs utilizing the WMA product or foaming process are submitted to SCDOT, and the results meet SCDOT requirements for Wet TS and % TSR ratio (per 401.2.3.4 of the Standard Specifications or any other Supplemental Specification), the product will be qualified to remain on QPL 77.

Anytime a chemical WMA product is added to a new source of neat asphalt binder, the LASA suppliers must retest their LASA with the new neat asphalt binder source and ensure that no issues exist and that the binder meets SCDOT and AASHTO specifications. All delivery tickets/BOL upon arrival at the asphalt plant must include WMA additive manufacturer name, additive name, and dosage. Copies of the BOL/delivery tickets will be kept on file at the Contractor's asphalt plant.

It is the manufacturer's responsibility to contact the Asphalt Materials Engineer in the event that the product's formulation, change in design, or product name has changed. Any changes in formulation of a chemical WMA additive may require a resubmittal to AASHTO for a new evaluation. **All products on QPL 77 must maintain current and compliant status with the AASHTO AMA program and must follow all work plan requirements including reevaluation every 7 years.**

The Department reserves the right to request a sample for further testing (AASHTO or testing by the SCDOT) from the WMA supplier, asphalt terminal, or Contractor in order for the product or process to retain qualified status on QPL 77. *A WMA product may be removed from QPL 77 if that product is no longer offered at the asphalt terminals listed on QPL 37, the foaming system has been removed from a plant, the product is no longer current or compliant with AASHTO, or the product has established a history of failing test results in the field or in the lab.*