GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF MATERIALS AND TESTING

Standard Operating Procedure (SOP) 17 B—Concrete Acceptance of Miscellaneous Construction Items

I. General

As an aid to construction and maintenance personnel, the Office of Materials and Testing (OMAT) maintains a Qualified Products List (QPL). This Standard Operating Procedure (SOP) provides guidelines to establish Qualified Products for use with miscellaneous construction items and governs the following QPL which are included in this SOP:

QPL	Item
QPL 13	Air Entraining Admixtures
QPL 14	Chemical Admixtures for Concrete
QPL 16	Membrane Curing Compounds
QPL 17	Special Surface Coatings for Concrete
QPL 42	Anti-Graffiti Coatings and Graffiti Removers for Concrete

Products that appear on these lists have been evaluated by Office of Materials and Testing (OMAT) and meet the appropriate Georgia Department of Transportation (GDOT) Specifications. Any of these products may be used without sampling or pre-testing provided the engineer determines the product is uncontaminated, undamaged, and unopened/expanded. However, products normally shipped as packaged units such as epoxy adhesives, special surface coatings for concrete surfaces, etc., may not be used if the units have been partially expended prior to arrival on the project. The engineer shall ascertain that the construction item is the same material identified on the appropriate QPL and shall acknowledge receipt of these items in the project diary or as required by the Construction Manual.

It shall be the responsibility of the Concrete Branch Chief to monitor products covered by SOP 17 B. OMAT will update the QPL a minimum of every twelve months. Representatives from OMAT, at unscheduled times, may visit the producer's plant or warehouse, construction, or maintenance projects, to obtain random samples of items covered by this SOP. Products which consistently produce test results that significantly vary from those established by the manufacturer and verified by OMAT shall be removed from the QPL. Products that meet the current requirements of the Specifications but do not perform satisfactorily in the field shall be removed from the QPL. Products that meet current requirements of the Specifications but were not submitted for annual evaluation upon request by OMAT will be removed from the QPL. Removal from the List shall prohibit the use of the product in GDOT work until the acceptability of the product is re-established and added back on the QPL. Products that have not been used in GDOT Construction or Maintenance projects for a period of twelve months will, at OMAT's discretion, be removed from the QPL. OMAT reserves the right to limit the number of products for each type of material from any manufacturer.

The Department may reject any product deemed by the State Materials Engineer to be hazardous to personnel in handling and testing.

II. Requirements

A. Manufacturers and Producers

Manufacturers and Producers shall adhere to the following requirements:

Samples may be submitted for Initial Evaluation at any time. Products covered by SOP 17 B -Concrete, currently approved by OMAT and listed on the GDOT's QPL shall be submitted for Annual Evaluation. Annual samples shall be submitted in accordance with SOP 17 B -Concrete to OMAT before September 15th of each calendar year.

When submitting a sample, OMAT requires the following:

- 1. A Product Evaluation Form (attached) shall be completed, listing each sample submitted for evaluation.
- 2. A Manufacturer Safety Data Sheet (MSDS) shall also accompany the sample when applicable. (See IIB).
- 3. Warranty letter as described in Section IIC.
- 4. The sample and required documentation shall be sent to the following address:

Georgia Department of Transportation Office of Materials and Testing 15 Kennedy Drive Forest Park, GA 30297-2599 Attn: Concrete Branch Chief concretebranch@dot.ga.gov

B. Independent Lab Evaluation

AASHTO Product Evaluation & Audit Solutions (formerly NTPEP) test results may be submitted for evaluation and consideration for acceptance for all admixtures. All Type S admixtures will require additional testing and a field trial. Test results from a private lab are required on some items before the Office of Materials and Testing will begin its evaluation. As a matter of information, any available test results, product data sheets, MSDS and independent lab evaluation and certification should be furnished when submitting a product for initial evaluation.

C. Annual Warranty

The manufacturer or producer shall submit an annual warranty for each product before being added to the QPL. The warranty shall be submitted on company letterhead and contain the following: Appropriate QPL warranty statement from Section III through Section VII followed by the additional statement below, signed by a person legally responsible to bind the company, and notarized.

The following additional warranty shall be included as the latter part of every warranty:

"We further warrant that material furnished to State of Georgia projects will be replaced without cost to the purchaser and State of Georgia when found not in conformity with any of the specified requirements. We accept full responsibility for determining the governing Specification for each order, provided we are given notice of revised Specifications, and we warrant that the material currently being furnished is identical in formulation, composition, and properties as the material originally submitted for source approval."

D. Identification of Products

Brand name, type, or lot or batch number, date of manufacture, and any other pertinent information shall be identified on submitted products. The manufacturer shall conduct sufficient tests and maintain product control records to verify that production is adequate to assure Specification compliance. The Manufacturer shall notify OMAT of any change in formulation or composition of any of their products on the QPL and submit samples for re-evaluation.

E. Production Quality Control Plan

Manufacturers must submit a copy of a production quality control plan for each of their products for review by the Office of Materials and Testing.

F. Company Product Labels

Product labels shall be unique to the company wishing to list its products on the QPL; therefore, companies will not be allowed to list product labels other than their own. <u>OMAT will not evaluate or list the same-labeled product in the</u> <u>OPL for multiple distributors, manufacturers, or producers.</u>

G. Initial or Annual Evaluation Submittals

Submittal of products for Initial Evaluation or Annual Evaluation shall be in accordance with this SOP 17 B -Concrete. OMAT will not evaluate any improperly submitted products.

III. (QPL 13) Air Entraining Admixtures

Air Entraining Admixtures for Portland Cement concrete shall meet the current requirements of Subsection 831.2.01 of the Georgia Department of Transportation Specifications. This specification requires that the material meets AASHTO M154 and ASTM C260.

A. Sample Requirements

One quart (1 L)

Each sample must be identified by type and contain instructions related to usage rates.

B. Warranty Letter:

"This is to warrant that the product (Product Trade Name) as manufactured and sold by (Company Name) is an Air Entraining Admixture meeting the current requirements of AASHTO M154 and ASTM C260." Include remainder of Warranty from Section IIC.

IV. (QPL 14) Chemical Admixture for Concrete

Water Reducing and/or Retarding Admixtures and Acceleration Admixtures shall meet the current requirements of Subsection 831.2.02 of the Georgia Department of Transportation Specifications. This specification requires that admixtures meet current requirements of AASHTO M 194 and ASTM C494, Type A, B, C, D, E, F, G or S unless otherwise specified. The length change requirements are waived, and the admixture shall contain no more than 0.8% chloride calculated as calcium chloride. Chemical Admixtures may be accepted based on AASTHTO Product Evaluation & Audit Solutions (Formerly NTPEP) testing results.

A. Sample Requirements

One quart (1 Liter)

Each sample must be identified by type and contain instructions related to usage rates.

B. Warranty Letter:

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a <u>(Water Reducing, Retarding or High Range Water Reducing)</u> Admixture complying with the current requirements of AASHTO M 194 and Subsection 831.2.02 of the Georgia Department of Transportation Specifications for Type <u>(</u>A, B, C, D, E, F, G or S). <u>(Product Trade Name)</u> contains not more than 0.8% Chloride calculated." Include remainder of Warranty from Section IIC.

V. (QPL 16) Membrane Curing Compound

Membrane Curing Compounds shall meet the current requirements of Subsection 832.2.03 of the Georgia Department of Transportation Specification. Membrane Curing Compounds shall be either Type I (clear or translucent) or Type 2 (white pigmented) as specified in AASHTO M148 and ASTM C494.

A. Sample Requirements

1 quart (1 Liter)

Each sample must be identified by type and contain instructions related to usage rates

B. Warranty Letter:

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name / Location)</u> is either Type 1 (clear or translucent) or Type 2 (white pigmented) Membrane Curing Compound meeting the current requirements of AASHTO M 148 and ASTM C494 (Type I or II).)

Include remainder of Warranty from Section II-C.

VI. (QPL 17) Special Surface Coating for Concrete

Surface Coatings for concrete shall meet the current requirements of Section 836 of the Georgia Department of Transportation Specifications. Manufacturers shall recommend uses, surface preparation, mixing instructions, applications, finishing requirements, and curing. Each container shall be labeled as to contents and use expiration date. In addition, complete mixing instructions shall be supplied with each shipment to the job site.

A. Sample Requirements

1. Initial Evaluation: 1 quart (1 Liter)

2. Annual Evaluation: Warranty Letter and Independent Laboratory Test Report or Certification.

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Special Surface Coating for concrete meeting the current requirements of Subsection 836 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

VII. (QPL 42) Anti- Graffiti Coatings and Graffiti Removers for Concrete

Graffiti Proof Coatings for Concrete shall meet the current requirements of Section 838 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

- 1. Initial Evaluation: 1 quart (1 Liter)
- 2. Annual Evaluation: Warranty Letter and Independent Laboratory Test Report or Certification.

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Graffiti proof Coating for Concrete/Graffiti Remover meeting the current requirements of Subsection 838 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

State Materials Engineer

Director of Construction