Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

ANANTH PRASAD, P.E.
SECRETARY

January 14, 2013

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section **919**
Proposed Specification: **9190000 Ground Tire Rubber for Use in Asphalt Rubber Binder.**

Dear Ms. Gourdine:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

These changes were proposed by Gregory Sholar, of the State Materials Office, to update the specification for current practice.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to SP965TT or trey.tillander@dot.state.fl.us.

If you have any questions relating to this specification change, please call me at 414-4140.

Sincerely,

V. Y. "Trey" Tillander, III, P.E.
State Specifications Engineer

TT/cah
Attachment
cc: Florida Transportation Builders' Assoc.
State Construction Engineer

GROUND TIRE RUBBER FOR USE IN ASPHALT RUBBER BINDER.
(REV 11-20-12)

SECTION 919 (Pages 997 – 998) is deleted and the following substituted:

SECTION 919
GROUND TIRE RUBBER
FOR USE IN ASPHALT RUBBER BINDER

919-1 Description.

This Section governs ground tire rubber for use in asphalt rubber binders for use in a variety of paving applications.

919-2 General Requirements.

The ground tire rubber shall be produced from tires~~. by an ambient grinding method. The entire process or a final separate grinding process shall be at or above ordinary room temperature. The rubber~~ *and* shall be sufficiently dry so as to be free flowing and to prevent foaming when mixed with asphalt cement. The rubber shall be substantially free from contaminants including fabric, metal, mineral, and other non-rubber substances. Up to 4% (by weight of rubber) of talc or other inert dusting agent, may be added to prevent sticking and caking of the particles.

The ground tire rubber used shall be one of the products listed on the Department's Qualified Products List (QPL). Manufacturers seeking evaluation of their product shall submit an application in accordance with Section 6.

919-3 Physical Requirements.

The physical properties of the ground tire rubber shall be determined in accordance with FM 5-559, and shall meet the following requirements:

Specific Gravity ..... 1.06 to 1.20
Moisture Content .....Maximum 0.75%
Metal Contaminants.....Maximum 0.01%
Gradation ……*~~100~~98% Passing the No. 30 Sieve*~~. The gradation shall meet the limits shown in Table 919-1 for the type of rubber specified.~~

~~Sieve Size % Passing~~	~~Type B~~	~~Type C~~
~~No. 16~~	~~---~~	~~100~~
~~No. 30~~	~~100~~	~~70-100~~
~~No. 50~~	~~40-60~~	~~20-40~~
~~No. 100~~	~~---~~	~~---~~

919-4 Chemical Requirements.

The chemical composition of the ground tire rubber shall be determined in accordance with ASTM D 297~~-93~~ and shall meet the following requirements:

Acetone Extract	Maximum 25%
Rubber Hydrocarbon Content	40 to ~~55~~*60*%
Ash Content	Maximum 8%
Carbon Black Content	20 to 40%
Natural Rubber	16 to 45%

919-5 Packaging and Identification Requirements.

The ground tire rubber shall be supplied in moisture resistant packaging such as either disposable bags or other appropriate bulk containers. Each container or bag of ground tire rubber shall be labeled with the manufacturer's designation for the rubber and the specific type, maximum nominal size, weight and manufacturer's batch or LOT designation.

919-6 Certification Requirements.

The Contractor shall provide the Engineer a certification conforming to the requirements of Section 6 from the manufacturer, confirming that the ground tire rubber meets the requirements of this Section.

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