

**ORIGINATION FORM**  
**Proposed Revisions to the Specifications**

**Date:**

**Specification Section:**

**Originator:**

**Articles/Subarticles:**

**Telephone:**

**email:**

**Why does the existing language need to be changed?**

**Summary of the changes:**

**Are these changes applicable to all Department jobs?**    Yes            No  
**If not, what are the restrictions?**

**Will these changes result in an increase or decrease in project costs?**    Yes            No  
**If yes, what is the estimated change in costs?**

**With who have you discussed these changes?**

**What other offices will be impacted by these changes?**

**Will this revision necessitate changes to the following:**    BOE            PPM            SDG            CPAM

**Design Standards**                      **List Affected Index Nos.**

**Other manual?**

**Are all references to external publications current?**    Yes            No  
**If not, what references need to be updated (please include changes in the redline)?**

**Will this revision necessitate any of the following:**

**Design Bulletin**

**Construction Bulletin**

**Estimates Bulletin**

Contact the State Specifications Office for assistance in completing this form.

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ANANTH PRASAD, P.E.  
SECRETARY

**MEMORANDUM**

**DATE:** November 13, 2014

**TO:** Specification Review Distribution List

**FROM:** Daniel Scheer, P.E., State Specifications Engineer

**SUBJECT:** Proposed Specification: **9190000 Ground Tire Rubber for Use in Asphalt Rubber Binders.**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Tanya Nash of the State Materials Office (SMO) add language to allow a new type of ground tire rubber. Also, the physical requirements for Specific Gravity were revised to reflect the product addition.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or online at <http://www2.dot.state.fl.us/SpecificationsEstimates/Development/IndustryReview.aspx> . Comments received after **December 11, 2014**, may not be considered. Your input is encouraged.

DS/dt  
Attachment

**GROUND TIRE RUBBER FOR USE IN ASPHALT RUBBER BINDER.  
(REV 11-3-14)**

SECTION 919 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 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 use of pelletized asphalt rubber is permitted provided the components of the pelletized rubber particles meet the requirements of this Section. Additionally, the pelletized particles must disassociate once blended with asphalt cement.*

The ground tire rubber used shall be one of the products listed on the Department's Approved Product List (APL). 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 .....	1.062 to 1.20
Moisture Content .....	Maximum 0.75%
Metal Contaminants .....	Maximum 0.01%
Gradation.....	Minimum 98% Passing the No. 30 Sieve

**919-4 Chemical Requirements.**

The chemical composition of the ground tire rubber shall be determined in accordance with ASTM D297-13 and shall meet the following requirements:

Acetone Extract.....	Maximum 25%
Rubber Hydrocarbon Content .....	40 to 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.