SECTION 410 BITUMINOUS SURFACE TREATMENT – SINGLE COURSE

Pavement Surface Treatments

A. **Asphalt Emulsion.** For asphalt emulsion quality assurance procedures, refer to Section B. Documentation and Sampling under Section 407-00 Tack Coat.

B. **Aggregate.** The aggregate to be used should be compatible with the emulsion being used. Before construction begins, the aggregate should be tested for gradation and from an approved source. During construction, if the EIC or inspector notice a change in the appearance of the aggregate, the stockpile should be tested again.

C. **Application.** An emulsion must "break" or set before the aggregate can adhere. "Breaking" is the reuniting of the asphalt globules from the emulsified phase, generally indicated by the color changing from brown to black. The rate of "breaking" is controlled by the specific type and concentration of emulsion and by the weather conditions. Therefore, weather should influence the Engineer's decision on how and when to run the job. The entire chipping operation should be as close together as possible. On warm breezy days, the emulsion will break quickly (3 to 5 minutes) and on overcast, damp, or humid days the break will be slower (10 to 15 minutes). Tracking by the roller can be minimized by using the tire watering system. Traffic should be kept off the section until the emulsion has broken and set.

D. **Cleanup.** One or two days after the surface has been treated, it should be lightly swept to remove any loose aggregate.

E. **Technical Support**

The Regional Materials Engineer and the Materials Bureau are available to provide assistance upon request.

**Related Contract Provisions**

§407, Tack Coat  
§618, Bituminous Materials