Kitsap County Department of Public Works



614 DIVISION STREET (MS-26), PORT ORCHARD, WA 98366-4699 | KITSAP1: 360.337.5777 | KITSAPGOV.COM

Fog Seal Fact Sheet

The County continues to search for innovative and cost-effective new technologies and practices.

One practice that has expanded county-wide over the past three years is the use of "fog seal"—a Specialized Modified Asphalt Emulsion—applied to roads that were recently chip sealed. A fog seal acts like an insulated blanket and has shown to have many benefits: It helps to retain more of the chip seal aggregate (the rocks); it concentrates UV light towards the pavement increasing the effectiveness of ice melt during snow events; it provides more visual contrast for road striping & its effectiveness; and, it performs similar to pavement making it more durable & aesthetically pleasing.

Fog seal is a single application, typically light, of emulsified asphalt to an existing asphalt surface. This type of maintenance treatment can be a valuable aid to renew weathered (oxidized) asphalt surfaces and improve the surface appearance, seal minor cracks and surface voids, and inhibit raveling.

Attributes:

- Protects the pavement structure from moisture intrusion and oxidation
- Improves pavement life and may delay the need for major maintenance or rehabilitation
- Improves road safety by enhancing color contrast between pavement surface and road markings
- Minimizes the effects of potential further shedding of road surface materials

Issues Addressed:

- Minor surface cracks
- Oxidation
- Raveling (due to segregation or poor compaction)

Process:

• A single light application of emulsified asphalt is sprayed on an existing asphalt surface. A slowsetting and low-viscosity grade of emulsified asphalt is commonly used to allow the emulsion flow easily into cracks and surface voids. This also enables the emulsion to coat aggregate particles on the surface and further improves the waterproofing of the surface. An application of Blotter Sand may be used to return traffic to the roadway which faces time constraints.



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Cost Benefits:

• Fog seal is a cost-effective maintenance option that can be used to repair raveling and preserve any distressed sections until funds became available for long-term repair options (i.e. mill and pave).

Traffic Control:

- Traffic control is required both for the safety of the traveling public and the employees performing the work.
- Traffic control is also required to ensure that the applied emulsion has had adequate time to cure prior to reopening to traffic. The curing time will vary depending on the pavement surface conditions and the weather conditions at the time of application. Any kind of traffic on uncured fog seal will compromise the treatment & may cause unsightly tracks.

TREATED (LEFT) VS. UNTREATED (RIGHT)



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OPEN GRADED FRICTION COURSE (CLOSE UP PICTURE OF TREATED SECTION)



For questions or comments, contact Kitsap1: 360.377.5777 or email: <u>help@kitsap1.com</u>

