

Problem:

Oxidation, cracks
and aged surface

Solution:

Rejuvenating
fog seal

Success Story: Rejuvenating Fog Seal

On the newly paved State Route 7 in Middle, TN, eFog Rejuvenating Fog Seal was used to address 16.1 miles of aging, oxidized shoulders. It had been 10 years since the shoulders had been paved, and they were looking ragged and worn next to the route's fresh hot mix asphalt surface. The Tennessee Department of Transportation (TDOT) wanted to improve the appearance of these shoulders, eliminate existing cracks less than 1/8" and evaluate how well eFog would perform in comparison to a conventional SS-1 fog seal in a nearby county.

The project began approximately seven miles south of I-40 at mile marker 172. Contractor Eubank Asphalt Paving & Sealing (Eubank) shot the rejuvenating fog seal at a rate of 0.11-gallons/sq. yd., achieving uniform coverage from start to finish. At the time of application, the product's temperature was 145° and had been diluted with hot water for a 50/50 mixture at the Ergon Asphalt & Emulsions terminal in Memphis.

Eubank's planning included multiple distributors, which enabled the company to apply two loads of eFog in less than two hours. Despite a humid, cloudy day, the average cure time of the material was between 35 and 40 minutes.

Even though crew members were stationed at major intersections to warn drivers of potential tracking, no tracking was reported. eFog's polymer modifier provided a durable film thickness, which was resistant to tracking.

Shortly after the rejuvenating fog seal was applied, a heavy rainstorm blanketed the job site. The material held up exceptionally well. One week after application, Eubank revisited the project and noted that the product continued at peak performance in spite of excessive wet weather. TDOT's Director of Materials & Tests Division was impressed with the material in relation to tackiness, lack of run-off, cure time and the appearance of penetration.

Ergon Asphalt & Emulsions and TDOT will continue to monitor the project, which is expected to provide an additional five years of service life to the shoulders.

For inquiries, contact:
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