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January 19, 2023

To whom it may concern:

I am Darren Hazlett, P.E. and previously worked for the Texas Department of Transportation (TxDOT) for 38 years (retired). I was in charge of the TxDOT Materials and Tests Laboratory for several years and responsible for all testing of asphalt for 20 years. There are several areas where Terra Pave's products are a good fit in the road construction arena.

Priming a Base

The workhorse material for priming a base is MC-30. This is an asphalt diluted with 40% kerosene to enable the material to penetrate into road base. This is to impart water resistance and develop a surface that another asphalt layer (chip seal or hot mix asphalt) will adhere to.

MC-30 only uses the kerosene for application and penetration, after which the kerosene evaporates into the air. This release of solvent (Volatile Organic Carbon - VOC) is detrimental to the atmosphere and is a contributing factor to the creation of ground-level ozone and smog.

Any material that can perform the same function as MC-30 without the emission of VOC is much more environmentally sound. Terra Prime is such a material.

The TxDOT project on SH-195 from 2013 is a good example, showing that Terra Prime not only performed as well as MC-30, but also does not emit VOC. I visited this site while it was under construction and the material performed well.

Base Stabilization

One traditional material used for stabilizing a road base is cement. Cement does have problems, however. Cement must be mixed uniformly into the base material and with moisture to hydrate the cement. During hydration it must also be protected from drying. Adding too little cement does little good and adding too much may produce a brittle material prone to cracking. Cement also has a high carbon footprint, requiring high production temperatures and chemical reactions that produce CO₂.

Terra Pave's Top Seal White seems to offer many advantages over cement. Field trials (Travis County 2016) have shown it is easier to apply and mix. Additionally, it needs to dry for good performance so there is no need to prevent evaporation like in using cement. I have seen several testimonials regarding its long-term performance. In fact, Top Seal White may be a good solution for arid areas, not needing substantial water for mixing and cement hydration, and providing good strength in areas not prone to much rain.

Summary

Terra Pave International has several products that seem to be a good fit with today's construction requirements, which include function, ease of application, and decreased carbon footprint.



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