



CIVIL ENGINEERING &
CONSTRUCTION MANAGEMENT

THE UNIVERSITY OF TEXAS AT TYLER
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07/07/2017

To whom it may concern,

Over the past 10 years, researchers at the University of Texas helped develop a series of polymer based products for constructing, repairing, and rehabilitating dirt and asphalt roads. These products include superior pavement preservation and maintenance materials.

Laboratory tests have demonstrated that these new polymer products consistently and substantially outperform the best competitive materials. These revolutionary non-petroleum based environmentally safe products have become an alternative for asphalt that is more expensive and has environmental implications at the same time. Additionally, these materials have approximately 10 time less carbon-footprint than asphalt and 100 times less than cement.

Inventor of these products was nominated for Tyler Prize in Environmental Achievement by the president of UT-Austin in 2013 because of the research work and innovations which improved environmental practices of the highway industry.

Terra Pave International (TPI) is a privately held company created to commercialize these high-quality, durable, environmentally friendly, safe and sustainable road materials. Since 2012, TPI has been building and improving roads in the United States and around the world, in the heat of South Africa and the cold of Canada.

TPI's pavement preservation products are tested by the Texas Department of Transportation (TxDOT). Extensive research conducted by TxDOT and the University of Texas at Austin found that Terra Pave products perform significantly better than all industry competitors in dry and wet strength, has very good penetrating depth, and the best sealing capability. In addition, Terra Pave products demonstrated the fastest curing time.

TPI's 'TerraPrime' is approved by TxDOT MPL (Material Producer List) as a replacement for the hazardous MC-30 and AE-P. Extensive research conducted by TxDOT and the University of Texas at Austin found Terra Prime to perform significantly better than all industry competitors in dry and wet strength, had the second greatest penetrating depth, and tied for the best sealing capability¹. Additionally, it had the fastest curing time². Aside from this, Terra Prime is a completely environmentally friendly water-based polymer emulsion that emits zero VOCs and is easily applied

¹ Mohan, Gouri, Yetkin Yildirim, Kenneth Stokoe, II, and Mustafa Erten. "Engineering Properties of Prime Coats Applied to a Granular Base." Journal of Testing and Evaluation 41.05 (2013): 713-18. Web. (http://compass.astm.org/DIGITAL_LIBRARY/JOURNALS/TESTEVAL/PAGES/JTE20120292.htm#_ga=1.205795219.186963595.1378320551)

² Juan Du. "Investigation of Curing Time and Strength Developments of Prime Coat Materials." Pavement Preservation Journal Winter 2011: pg. 35. Print and web. (<http://www.nxtbook.com/nxtbooks/naylor/FPPQ0411/index.php?startid=35>)

with conventional equipment³. Testing conducted at TxDOT, along with analysis of multiple test sections established by the City of Austin, found Terra Fog to be water resistant, more durable than competitor fog seal products, and aesthetically pleasing⁴. Terra Fog, additionally, emits zero VOCs and is easily applied using conventional equipment.

Terra Pave products emit zero volatile organic compounds (VOCs) and are easily applied with conventional road construction equipment. This cutting-edge technology has the potential to improve the performance, environmental efficiency and cost savings for paved and unpaved roads and provide an array of innovative solutions for complex transportation challenges around the world.

Please do not hesitate to let me know if you have any questions or concerns regarding this matter, or if you need further clarification on any issues, and I'll be happy to send over the appropriate test results and publication.

Sincerely,



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TxDOT References

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³ Suzek, A., Yildirim, Y., "MC-30: Exploring its Risks and Continued Use" International Road Federation, 2013 World Conference Proceedings.

⁴ Graff, J., City of Austin Terra Fog Seal Test Section Report on South 1st street. March 6, 2014

