

TEXAS TRANSPORTATION INSTITUTE

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October 11, 1999

Environmental Soil Stabilization, L.L.C.
4025 Woodland Park Blvd., Suite 165
Arlington, Texas 76013

Attention: Mr. Russell J. Scharlin, P.E.

Reference: Hydrogen Ion Exchange Chemical Solution Marketed by Environmental Soil Stabilization, L.L.C.


Dear Mr. Scharlin,

In response to your question regarding the performance of your product in other types of soils, I would like to inform you that after having studied its mechanism of soil stabilization, I have come to the conclusion that its optimal performance can be expected in any type of expansive soil, irrespective of its location or origin.

The chemical solution responds to smectite group of clay, which is known to swell in the presence of water. Whether the smectite clay is located in a different state is irrelevant, because the mineralogical composition of smectite will still be the same.

I hope this clarifies the point which you recently raised. Please do not hesitate to contact me, should you have any further questions.

Truly yours,



Shondeep L. Sarkar, Ph.D., P.E.
Research Scientist