

# Memo:

**From: G.M. Boston Company**

**Date: April 9, 2002**

## **Results of TCLP test for Volatile Organic Compounds levels in PX-300**

Rosa Environmental & Geotechnical Laboratory in Seattle has conducted an independent TCLP test on G.M. Boston's PX-300 Soil Stabilization Compound. The TCLP test represents an EPA standard set of analytic criteria for potentially harmful VOC's.

PX-300 was applied to a standardized laboratory soil and allowed to cure as it would in the field, and the material was then pulverized and subjected to the standard TCLP battery of extraction processes, and the resulting leachate analyzed.

The most relevant test results are detailed in the next 3 pages:

1. CASE NARRATIVE: a one-page summary of procedures and results
2. ORGANICS ANALYSIS DATA SHEET – the two-page summary of data from the PX-300 (Lab Sample ID: EE55A) showing all "U"s (for "Undetected") in the far right results column

### **Bottom Line: PX-300 passes with flying colors!**

The attached documents indicate that PX-300 is very clean – i.e. "Undetected" VOC's which indicates complete polymerization of the product and "that none of the volatile components are left in the soil after...polymerization is completed."

This means there should be no harmful runoff (or "leachates") from soil treated with PX-300.

And that is very good news for those of you with environmentally sensitive projects.

### **G. M. Boston Company**

312 Fullerton Avenue

Newport Beach, CA 92663

(949) 722-6799

(562) 592-0836

Craig Hoad – [craighoad@gmbostoncompany.com](mailto:craighoad@gmbostoncompany.com)

Greg Boston – [gboston@gmbostoncompany.com](mailto:gboston@gmbostoncompany.com)

<http://www.gmbostoncompany.com/>

**Rosa Environmental & Geotechnical Laboratory, LLC**

1001 SW Klickitat Way, Suite 107  
Seattle, WA 98134  
206.287.9122 P  
206.264.1995 F

Client: G. M. Boston Company

REGL Project No.: 1081-519

Client Project No.: PX-300 Testing

**Case Narrative**

1. A sample of clean soil was spread out on a large, flat pan to a depth of about 3/16-inch. The PX-300, which was provided fully prepared in a spray bottle, was sprayed onto the soil until the soil was damp. The soil was then allowed to dry. When fully dried, a second application was applied, spraying the soil until it was damp again. The soil was then allowed to dry for 3 days.
2. At the end of 3 days, the soil was broken up into pieces that would pass a 3/8-inch sieve. The soil was placed in a sample bottle and sent to Analytical Resources, Inc. for TCLP-VOA analysis.
3. The report from ARI shows the results of a method blank, the sample itself, and a matrix spike samples.
4. The method blank shows that there was nothing detected in the spike. This shows that there was no cross contamination between samples in the laboratory batch.
5. The PX-300 sample data shows that there was none of the compound listed present, at the detection limit shown.
6. The matrix spike data shows that when the chemicals were added to the test sample, or spiked, that they were detected. The % recovery shows how good of a recovery was made.
7. The information provided by G. M. Boston indicates that the PX-300 polymerizes as it dries. The test data indicate that none of the volatile components are left in the soil after this polymerization is completed.
8. There were no other anomalies noted to the samples or testing.

Approved by: \_\_\_\_\_  
Title: Laboratory Manager

*Harold Berry*

Date: 4/8/07



PX-300 TCLP Results Page 2 of 2



ORGANICS ANALYSIS DATA SHEET

TCLP Volatiles by Purge & Trap GC/MS

Page 2 of 2

Sample No: PX300

Lab Sample ID: BE55A

QC Report No: BE55-REGL, LLC

LIMS ID: 02-3238

Project: PX300

Matrix: Solid

1081-519

Date Sampled: 03/19/02

Date Received: 03/19/02

Data Release Authorized: *[Signature]*

Reported: 04/03/02

"U" signifies "Undetectable" at this level of sensitivity (i.e. the "ug/L" value)

Instrument: FINN3  
Date Analyzed: 03/27/02

Sample Amount: 0.50 ml.

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	10 U
95-50-1	1,2-Dichlorobenzene	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
107-02-8	Acrolein	500 U
74-88-4	Methyl Iodide	10 U
74-96-4	Bromoethane	20 U
107-13-1	Acrylonitrile	50 U
563-58-6	1,1-Dichloropropene	10 U
74-95-3	Dibromomethane	10 U
630-20-6	1,1,1,2-Tetrachloroethane	10 U
96-12-8	1,2-Dibromo-3-chloropropane	50 U
96-18-4	1,2,3-Trichloropropane	10 U
594-20-7	2,2-Dichloropropane	10 U
74-97-5	Bromochloromethane	10 U
106-93-4	Ethylene Dibromide	10 U
142-28-9	1,3-Dichloropropane	10 U
98-82-8	Isopropylbenzene	10 U
110-57-6	trans-1,4-Dichloro-2-butene	50 U
103-65-1	n-Propylbenzene	10 U
108-86-1	Bromobenzene	10 U
108-67-8	1,3,5-Trimethylbenzene	10 U
95-49-8	2-Chlorotoluene	10 U
106-43-4	4-Chlorotoluene	10 U
98-06-6	tert-Butylbenzene	10 U
95-63-6	1,2,4-Trimethylbenzene	10 U
135-98-8	sec-Butylbenzene	10 U
99-87-6	4-Isopropyltoluene	10 U
104-51-8	n-Butylbenzene	10 U
120-82-1	1,2,4-Trichlorobenzene	50 U
87-68-3	Hexachlorobutadiene	50 U
91-20-3	Naphthalene	50 U
87-61-6	1,2,3-Trichlorobenzene	50 U

TCLP Volatile Surrogate Recovery

d4-1,2-Dichloroethane	95.0%
d8-Toluene	92.3%
Bromofluorobenzene	92.1%
d4-1,2-Dichlorobenzene	106%

FORM-1