



BANTOX® & BLASTOX®

Technical Bulletin

TB -008

Use of Blastox® Chemistry with Recyclable Steel Abrasive

Blastox® is an EPA Best Demonstrated Available Technology (BDAT) for lead stabilization. It has been effectively used in lead abatement projects for 8 years with non-recyclable abrasives to stabilize lead in paint waste.

In 1998, the EPA banned as impermissible dilution, the addition of iron and steel into lead containing waste stating "the practice essentially blinds the analytical method but would not in fact prevent lead from leaching under disposal conditions." They stated that the use of iron containing abrasive to remove lead paint from bridges was not impermissible dilution. However, they strongly cautioned against a reliance on a waste determination (by TCLP) of non-hazardous due to the presence of iron, as this would not be a shield against future liability if the disposal results in environmental damage. This ruling has resulted in a demand for Blastox® by contractors and generators using recyclable abrasive systems.

Blastox® Testing

Utilizing several samples from actual recyclable steel abrasive paint removal projects, independent laboratory analysis has concluded that the presence of Blastox® effectively stabilizes this lead waste. Many sample types were tested, including spent abrasive/paint waste, magnetically separated paint waste (minus steel abrasive, which eliminated temporary stabilization effect of steel) and Blastox®/separated paint waste. The following data show the leachability of the separated paint waste and the positive effect of Blastox® on the leachability of separated paint waste.

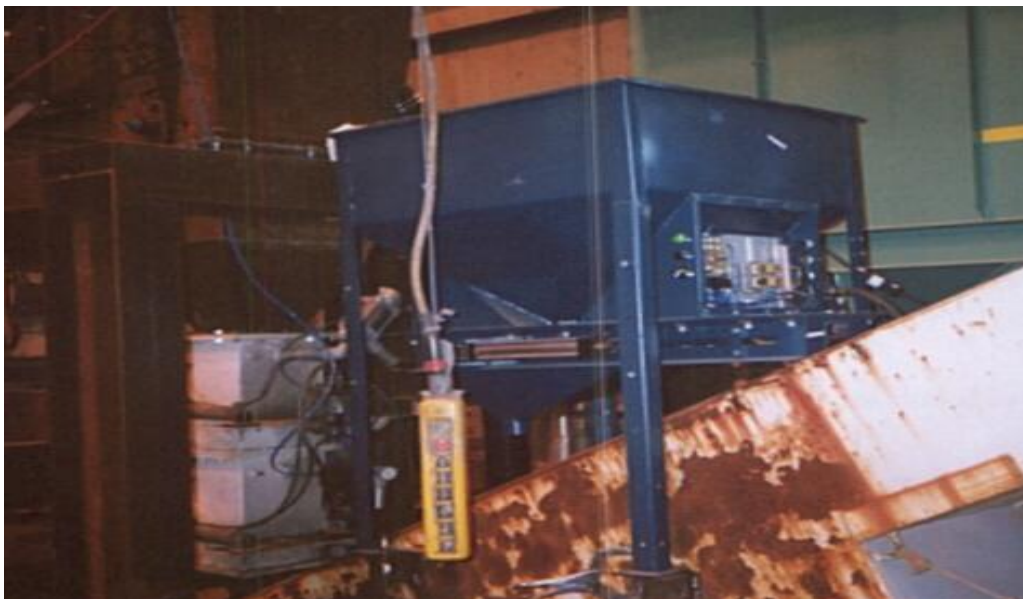
Sample	Total Pb in Paint	Leachable Pb in Paint	Leachable Pb in Paint w/ Blastox®
1	11%	42	*BDL
2	19%	20	*BDL

* Below Detection Limits (BDL) indicates that any leachable lead present, if any is below the testing capabilities of the instrument. Here, that detection limit is .20 mg/l.

Operation of the Blastox® Injection System

The TDJ Group has developed equipment which will feed Blastox® into steel abrasive conveyance systems, blending it with steel abrasive as it is added to the blast pot. The injection system controls are designed to operate in sync with the double dump valve (or other metering device) and add Blastox® to each cycle of new or cleaned abrasive. Blastox® is further blended with the abrasive as it is transported to the blast pot and blasted onto the painted substrate. The injection system has been designed to be compatible with all of the currently available abrasive recycling systems.

Blastox® Feed Unit Atop Abrasive Conveyance Belt



Testing has proven the Blastox® Injection system to be extremely effective in applying Blastox® and achieving lead stabilization. To learn more about its use and its advantages for your next recyclable steel abrasive project, please contact your Regional Sales Manager, or Technical Services at 1-800-BLASTOX.