

LABORATORY TESTING OF BAG HOUSE DUST

The EPA requires either a Toxicity Characteristic Leaching Procedure (TCLP) test or 'generator's knowledge of the waste' to characterize bag house dust as being hazardous or non-hazardous. Because of disposal costs and potential liabilities of assuming a waste has a specific characteristic, the industry standard practice is to have the bag house dust tested by TCLP at a qualified laboratory. The outcome of these tests has a significant bearing on subsequent material handling and disposal.

The EPA has outlined a protocol (EPA TCLP Method 1311) specifying the necessary steps for consistent administration of the TCLP test method. Despite this "recipe" for performing the test, laboratories that do not routinely maintain a high frequency of TCLP testing may not produce accurate results every time. Flawed results may cost foundries unnecessary expenses and/or lead to disposal decisions which are not environmentally sound. To minimize potentially flawed results on bag house dust stabilized with Bantox®, **the engineer should request the laboratory to report initial pH, pH after hydrochloric acid addition and final pH of extract.**

Before foundry engineers send their bag house dust for TCLP testing, it is in their best interest to check into the selected laboratory. The selected laboratory should be accredited by American Industrial Hygiene Association (AIHA), or American Association for Laboratory Accreditation (A2LA), or have a comparable state accreditation.

To determine whether a waste is hazardous, the TCLP is the proper test to be performed, as discussed above. TDJ Group also recommends that a Total Metals Analysis be performed as part of a good waste management program. This provides the ability to measure and monitor the quantity and variability of metals in the waste stream. It is especially critical for foundries when installing and operating a TDJ Group customized stabilization system.

Please contact Technical Support Manager for The TDJ Group, if you should have questions regarding TCLP testing, Total Metals Analysis, or interpretation of results.