LABORATORY TESTING OF SPENT ABRASIVES

The EPA requires either a Toxicity Characteristic Leaching Procedure (TCLP) test or ‘generator's knowledge of the waste’ to characterize spent abrasives 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 spent abrasive tested by TCLP at a qualified laboratory. The outcome of these tests have 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 contractors and generators unnecessary expenses and/or lead to disposal decisions which are not environmentally sound. To minimize potentially flawed results on Blastox® spent abrasives, the contractor should request the laboratory to report initial pH, pH after hydrochloric acid addition and final pH of extract.

Before contractors/generators send their spent abrasive for TCLP testing, it is in their best interest to check into the selected laboratory. The selected laboratory should be state certified or hold state accreditation through the National Environmental Laboratory Accreditation Program (NELAP). Ideally the lab of choice should also hold additional accreditation through the American Industrial Hygiene Association (AIHA), or American Association for Laboratory Accreditation (A2LA).

Also of critical importance are the instructions given to the laboratory on the type of test(s) needed. A TCLP test (EPA Method 1311) for the heavy metal in question (typically Lead) is the proper test which should be requested to determine if your waste is hazardous or non-hazardous, rather than a Total Metal test. A total metal test is usually performed prior to the start up of a project to determine if, and at what percent, lead is present in a particular coating system. A total metal test does not provide data necessary to make a disposal decision.

Please contact Technical Support at The TDJ Group, if you should have questions regarding TCLP testing and/or interpretation of results.

Contractor is required to establish his own account, and should obtain pricing at the time of inquiry. TDJ assumes no responsibility or liability for the use of this information.