



## **GUIDE TO OBTAIN A REPRESENTATIVE SAMPLE OF STABILIZED SOIL WASTES**

Use of a proper sampling method is vital to obtain a representative sample of soil waste. A representative sample of soil waste is necessary to accurately characterize (hazardous or non-hazardous) your stabilized waste piles. If improperly conducted, valuable time and resources may be wasted by contractors, generators and consultants. The bottom line is that sampling errors result in additional, unnecessary costs to everyone involved.

EPA manual SW-846 and ASTM\* standard D75 address proper ways of conducting sampling activities to produce a representative sample, but soil contractors may not have these documents or find them to difficult to interpret. This bulletin intends to assist you in learning a sound approach to obtain representative samples.

For a given project, several smaller samples should be randomly pulled from various areas of the waste pile; this includes top-to-bottom level sampling. Samples should not be pulled from tops of piles, as segregation of varying particle sizes may affect the uniformity of any given sample. Rather, it is important to dig down into the stabilized soil waste with a tool, such as a small garden hand shovel or a core sampler, and obtain samples. Depending on the size of the waste pile, we suggest eight (8) to ten (10) smaller samples be obtained. These smaller samples should be combined into a larger pile and subsequently split with a mechanical splitter or placed in a rounded pile and split with a shovel into four sections. From these procedures, you will obtain four (4) large samples of at least 500 grams.

The required number of samples to collect & test is typically determined by the project work plan, or State and local regulations. Please consult these resources to determine how many samples need to be collected and tested. At a minimum, one (1) of the four (4) large samples collected above should be split into two (2) smaller samples. One split should be sent to a lab for TCLP testing and the other split should be kept separate and retained by the responsible party in the event further testing is necessary. Samples sent to lab should be approximately 250 grams each, or a one quart baggie filled one-half full.

If these procedures are followed, a representative sample should be obtained and any subsequent testing of the samples at qualified laboratories should be valid. For further assistance, please contact Technical Support Manager, The TDJ Group, Inc.

\*Copies of ASTM standard C-702-87, "Reducing Field Samples of Aggregate to Testing Size", i.e., splitting of samples and D 75-87, "Sampling Aggregates", can be obtained by calling the American Society for Testing and Materials office at 610-832-9500 in West Conshohocken, PA.